

Herald Tribune

Published With The New York Times and The Washington Post

Guinean Military Seizes Power 3 Days After Touré Funeral

By Claude Regin

ABIDJAN, Ivory Coast — The Guinean armed forces said Tuesday that they had seized power overnight in a bloodless coup, just three days after the funeral of President Ahmed Sékou Touré.

A statement read by an unidentified military spokesman on Conakry radio said the nation's armed forces — the army, navy, air force, gendarmerie and people's militias — had assumed collective responsibility for the country. Conakry is the Guinean capital.

The coup took place "without bloodshed, in complete calm and amid popular rejoicing," the spokesman said.

He described Mr. Sékou Touré's 26-year rule as a "bloody and ruthless dictatorship" marked by widespread corruption.

The armed forces had "decided to take over the running of the country in order to lay the foundations of a true democracy, avoiding, in the future, any personal dictatorship," the spokesman said.

He said all political prisoners would be freed, and he vowed that Guinea would honor all international commitments.

Guinea, although a Soviet client state for years, has made gestures toward the West in recent years in an effort to shore up its economy, one of the world's poorest.

The spokesman said a "military redemption committee" was running the country of 5.5 million people. It was not clear Tuesday whether the takeover was led by the armed forces chief of staff, General Teyé Condé, or by less senior officers.

The ruling Guinean Democratic Party and the National Assembly were dissolved and the constitution was suspended. A curfew was imposed from 10 P.M. to 6 A.M., and all borders were closed. Commanders of the country's military zones were given responsibility for maintaining law and order.

He gave no clue of the fate of government ministers or the 14

members of the ruling Political Bureau, who were due to meet Tuesday to choose a successor to Mr. Sékou Touré. The president died March 26 while undergoing heart surgery at a clinic in Cleveland, Ohio.

Diplomatic sources speculated that most government ministers and members of Mr. Sékou Touré's family would face trial.

Mr. Sékou Touré was buried Friday in a funeral service attended by leaders of nations around the world.

"The Guinean people had not dried its tears," Conakry radio said, "yet a tough struggle for the succession was under way among Sékou Touré's companions, whose hands are sullied with the blood of so many innocent people."

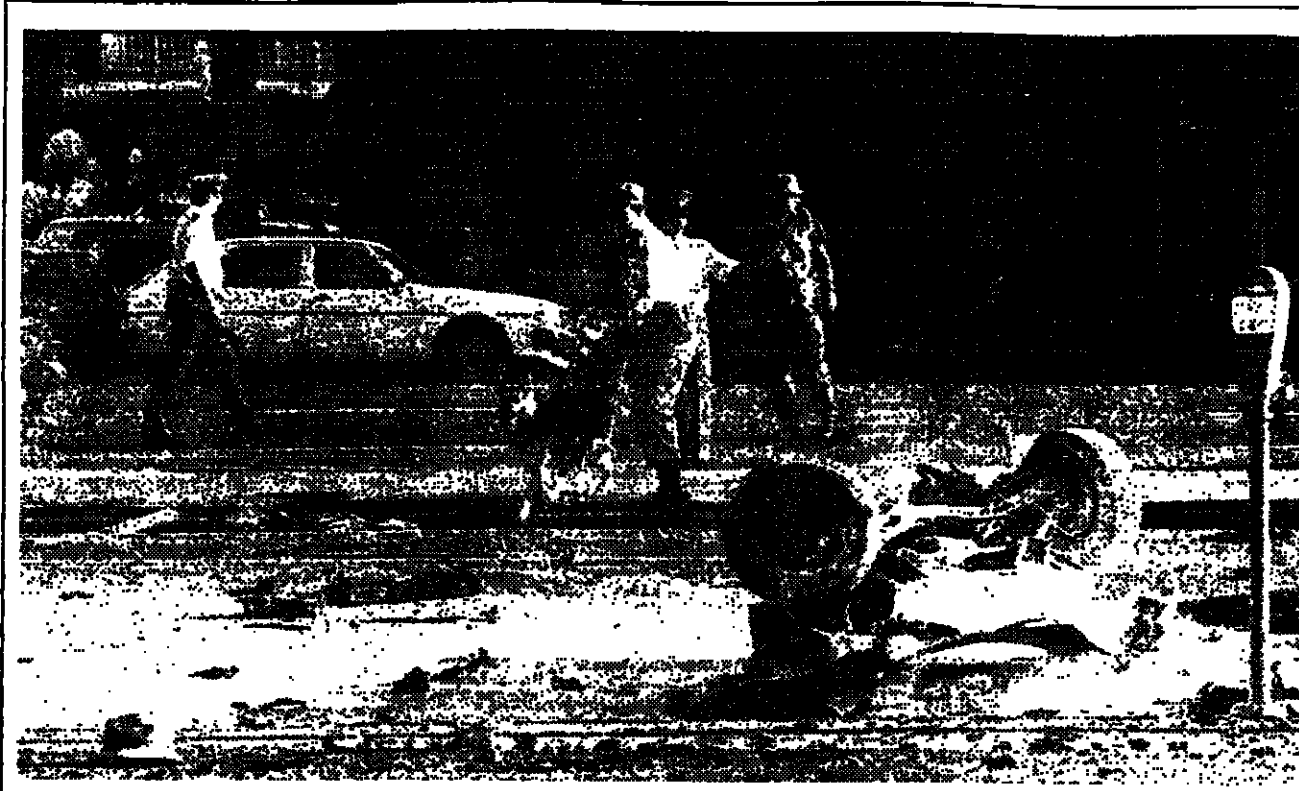
Among Mr. Sékou Touré's closest associates was Prime Minister Louis Lansana Beavogui, 61, a lifelong friend who had been favored to succeed him. His fate was not known.

The spokesman praised the late leader's influence in Africa, where he was a major proponent of African unity, but criticized his domestic record.

"Under the feudal pressure of his family and dishonest companions of his early struggle," he said, "hope for a more just and more equitable society disappeared, swept away by a bloody and ruthless dictatorship."

Human rights organizations have accused the Sékou Touré regime of jailing or killing thousands of Guineans, and driving into exile almost a fifth of the country's people. Amnesty International, the London-based human rights group, has listed 2,900 people who it says have disappeared. But government-sponsored repression is thought to have eased in recent years.

The military spokesman said the memory of all those who died "simply because they wished to express their opinions on the country's future" would be honored. "Those martyrs will be rehabilitated and immortalized," he said.



SOUTH AFRICAN BLAST — Car wreckage lies in a Durban street after a bomb exploded, killing three

persons and injuring 16. An official blamed the African National Congress for the attack Tuesday. Page 2.

Large Soviet Fleet Assembles in Norwegian Sea

The Associated Press

OSLO — A Soviet fleet of at least 27 surface ships, supported by submarines and aircraft, has assembled in the Norwegian Sea for a major naval exercise, the Norwegian Defense Command said Tuesday.

The command said it assumed that the Soviet fleet, led by a nuclear-powered Kirov-class cruiser, was gathering for exercises in the Norwegian Sea and in the Atlantic Ocean between Iceland and Britain.

"Air activity in connection with the Soviet fleet's movements has been great," the command said in a statement. It did not say what type of aircraft were involved, nor did it estimate the number of submarines.

In London, the British Defense Ministry said that the Soviet naval maneuvers were thought to be the biggest ever carried out in the Atlantic waters off northern Europe.

A Defense Ministry spokesman said the Soviet fleet sailed into the Norwegian Sea between North Cape on Norway's northern tip and Denmark's Faeroe Islands.

Soviet exercises are also taking place in the Mediterranean and the Indian Ocean, a Defense Ministry spokesman said. He noted that the Soviet helicopter cruiser Leningrad recently sailed from Cuba.

"Such high level of activity outside the normal fleet operating bases has led NATO staff to conclude that the Soviet Navy and its air arm has commenced a major fleet exercise, probably the largest seen in Atlantic waters," he said.

The British Broadcasting Corp. said intelligence experts were placed on emergency alert to monitor the operation and were preparing special reports for the NATO nuclear planning group, which began a two-day meeting Tuesday in Izmir, Turkey.

A West German defense spokesman in Izmir said the North Atlantic Treaty Organization had sent two ships to monitor the Soviet fleet. He said he had only learned of the maneuvers on Tuesday morning.

In Washington on Tuesday, a navy spokesman refused to comment on the operation, but a Pentagon official confirmed that a large maneuver was under way and said it was "under observation."

The Soviet Union staged a naval exercise in the North Atlantic last September that was described as the largest Soviet naval maneuver there since 1975. Norwegian experts said the current exercise may be bigger.

Ships already assembled come from the Soviet northern fleet based at Murmansk on the Kola

Peninsula and from the Baltic fleet. As of Monday, the fleet consisted of three groups.

One, which was heading west off of northernmost Norway, comprised six cruisers, seven destroyers, a mine layer and an amphibious vessel.

A second group of four frigates and a supply vessel was near Norway's Jan Mayen Island. The third group, off the Shetland Islands, included a cruiser, four frigates and

two tankers, all from the Baltic Fleet.

NATO last month completed its largest naval and amphibious maneuvers ever in the Norwegian Sea and in northern Norway.

NATO notified the Warsaw Pact of its recent exercises, and the Soviet and other East-bloc commands sent observers in compliance with the Helsinki Accords of 1975.

The notification commitment applies only to maneuvers involv-

ing 25,000 or more ground troops.

■ NATO May Send Observers

NATO representatives will decide Wednesday whether to send experts to observe the Soviet exercise, a senior NATO official said Tuesday in Izmir. Reuters reported.

Other officials said the speed of the Soviet buildup appeared to have surprised Western intelligence.

NATO Ministers Press Netherlands To Deploy Quota of Cruise Missiles

Compiled by Our Staff From Dispatches

CESME, Turkey — NATO defense ministers pressed the Netherlands Tuesday to deploy its quota of 48 cruise nuclear missiles as part of a Western plan to counter Soviet medium-range rockets.

Manfred Wörner of West Germany told reporters after the first day of a ministerial nuclear planning group meeting: "We all expressed the expectation that all NATO states would carry out the decision."

Officials said there was strong pressure on the Dutch not to curtail or renounce deployment, but Defense Minister Jacob de Ruiter had given no commitment, Reuters reported.

Five North Atlantic Treaty Organization countries pledged in 1979 to install U.S. cruise missiles. Unlike West Germany, Britain, Italy and Belgium, the Dutch parliament has not yet given final approval.

A senior NATO official, who declined to be identified, described the discussion as tough and said several ministers urged the Dutch government not to hide behind its uncertain parliamentary majority.

The U.S. defense secretary, Caspar W. Weinberger, stopped in the Netherlands on his way to Cesme to urge the Dutch to accept their full quota of cruise missiles.

Mr. Weinberger also told ministers that Washington has ruled out a ban on anti-satellite weapons and accused Moscow of violating the 1972 anti-ballistic missile treaty, The Associated Press reported.

Senior U.S. defense officials, reporting on Mr. Weinberger's remarks, said, "There are insurmountable verification problems associated with a complete ban on anti-satellite weapons."

Mr. Weinberger and his aides said that construction of a large

radar system at Krasnogorsk, covering the entire Soviet Union, violated the 1972 anti-ballistic missile treaty.

Mr. Weinberger also made clear that Washington wants to include allies in anti-ballistic missile systems under development.

The new systems would protect both the United States and Western Europe, according to Mr. Weinberger.

The U.S. delegation reportedly said that some of those defenses would have to be based in Europe.

There was no discussion of who would pay for such defenses, the officials said. (Reuters AP)

■ Reagan Sees Limited Ban

Walter Pincus of The Washington Post reported from Washington: President Ronald Reagan, while ruling out formal negotiations with the Soviet Union on a comprehensive ban of anti-satellite weapons, has said that the administration is exploring limited agreements that could protect specialized, high-alti-

tude satellites, such as those used for arms control information and early warning of a strategic nuclear attack.

"Bans on specialized anti-satellite weapons and much less ambitious undertakings could help preserve and enhance stability," if they are equitable and verifiable, Mr. Reagan said in a report sent to Congress Monday.

Among the ideas being considered, according to administration sources, are:

• A ban on tests of satellite killers at altitudes above 5,000 kilometers (3,125 miles). Both sides would be permitted to have such systems at lower altitudes.

The present Soviet anti-satellite system and the U.S. weapon under development work only at lower altitudes.

• Peacetime rules to keep satellites certain distances apart, prohibit interference with their operation and provide for notification if they come too close.

Guerrillas Attack Israelis in Southern Lebanon

Reuters

BEIRUT — Guerrillas in southern Lebanon launched new attacks on Israeli occupation forces Tuesday as speculation grew that Israel would avenge the wounding of 50 people by Palestinian guerrillas in Jerusalem on Monday.

Seven Israeli soldiers were wounded when a grenade hit an armored personnel carrier in the southern town of Nabatieh, witnesses said. Several bystanders also were injured, they said.

In another attack, three Israeli soldiers were wounded by an explosion on a bridge across the Litani

River, according to Beirut radio. The radio also reported that guerrillas in the southern port city of Sidon detonated a roadside bomb by remote control as an Israeli patrol was passing, but gave no details of casualties.

Religious and political leaders of Lebanon's Shiite Muslim community, the largest sect in the south, have called for what amounts to open war against the Israeli occupation.

Meanwhile, a cease-fire in the separate conflict between warring Lebanese factions in and around Beirut was interrupted Monday night and early Tuesday by fighting

Politician Slain, Rioters, Police Killed in Punjab

By William K. Stevens
New York Times Service

NEW DELHI — V.N. Tiwari, a Hindu member of Parliament, was shot to death Tuesday at his home in the Punjab capital of Chandigarh by persons who had said they were students waiting to see him. He was also a university professor.

Mr. Tiwari, a member of the Rajya Sabha, or upper house, was the first member of Parliament to die in a series of terrorist killings. The level of tension heightened in Punjab and the neighboring state of Haryana.

[The entire state of Punjab was declared a "dangerously disturbed area" under the Special Powers Act Tuesday night after 10 rioters and two policemen were killed in violence in the Sikh holy city of Amritsar. Reuters quoted the Press Trust of India as saying.]

[A Home Ministry spokesman in New Delhi said the act gave police and paramilitary troops authority to shoot to kill rioters, open fire to disperse illegal gatherings, destroy arms dumps and enter any place suspected of sheltering criminals.]

[Police opened fire at three places in the city to disperse mobs burning and looting shops and standing vehicles, the Press Trust said.]

[It reported that one of the dead policemen was lynched by rioters and the other died of sword wounds.]

More than 150 people have been killed in sectarian violence in the region in the past two months. A Sikh group calling itself the Dismish Regiment, unknown until recently, claimed responsibility for the murder of Mr. Tiwari, who was a member of Prime Minister Indira Gandhi's Congress-I Party.

The regiment also said that it was responsible for Monday's killing of Harbans Lal Khanna, leader of the pro-Hindu Bharatiya Janata Party in Amritsar, as well as for the assassination in Delhi on March 28 of a moderate Sikh leader who had been considered an enemy of the terrorists' cause.

In a letter left outside the office of a news agency in Chandigarh, the regiment threatened to kill "one senior officer every day in Punjab" until a government ban on a radical student group, imposed late last month, is lifted and university examinations in Punjab are postponed.

The student group, the All-India Sikh Students Federation, is regarded as perhaps the most extreme element of a small, disparate band of about 500 terrorists who have caused most of the havoc in Punjab.

Intelligence sources said it has acted as the spearhead of an extremist wing that has seized momentum from the moderate Sikh leadership, which started a campaign for greater Punjab autonomy

and special religious facilities in August 1982.

The Sikhs object to a clause in the constitution that classifies Sikh beliefs as part of the Hindu religion. Home Affairs Minister Prakash Chand Sehri said recently the government was prepared to amend the constitution to guarantee separate religious and ethnic identity to the Sikhs.

It is unclear what the Dismish Regiment is. "Dismish," in Punjabi, means "followers of the 10th guru." The 10th Sikh guru is Gurbach Singh, who advocated the sword as a holy instrument of politics.

According to police reports, two persons knocked at Mr. Tiwari's door and told a servant they were students from the Punjab city of Patiala. The professor came out and invited them into the drawing room. While one guarded the door, the other followed him and fired six bullets at him. The assassins fled in a waiting car.

In Parliament Tuesday, the entire opposition walked out of the Lok Sabha, or lower house, and boycotted the day's proceedings as a mark of respect for Mr. Tiwari, a close associate of President Zail Singh. It did so after the deputy speaker refused to adjourn the house.

Indian Takes Part In 8-Day Soviet Space Mission

The Associated Press

MOSCOW — The Soviet Union launched Tuesday a spacecraft carrying India's first astronaut, Rakesh Sharma, 35, and two Soviet cosmonauts, Yuri V. Malyshev, 42, and Gennadi M. Strekalov, 43, on an eight-day mission.

The Soyuz T-11 spacecraft was launched at 5:08 P.M. Moscow time from a base at Baikonur in Soviet Central Asia. It is to dock Thursday with the orbiting Salyut-7 space station, where three Soviet cosmonauts have been working since a Feb. 8 launch.

Soviet space officials have said that, on the suggestion of Indian space researchers, Mr. Sharma will practice yoga in an experiment on weightlessness.

The launch was carried on television, only the third Soviet launch to be broadcast live. In another departure from normal practice, the Soviet Union has scheduled daily press conferences and televised programs for foreign journalists.

The launches of only two other Soviet missions, the Soviet-French joint effort in June 1983 and the July 1975 mission in which a Soviet Soyuz linked up with a U.S. spacecraft, were broadcast live.

China Reportedly Sends Military Supplies to Iran

By Michael Weisskopf

Washington Post Service

BEIJING — China has covertly supplied Iran with combat aircraft and other military equipment in sales funneled through North Korea since the Iranian-Iraqi war began, according to foreign military sources here.

At the same time, China reportedly has been selling lesser amounts of arms to Iraq.

Iran, which has had difficulty replenishing its armed forces, has reportedly paid handsomely for the Chinese supplies. One deal last spring netted China \$1.3 billion for 10 fighters, T-59 tanks, 130mm artillery and light arms to be delivered over a three-year period, according to Arab and Asian sources.

Iran also agreed to give China access to the latest Soviet weapons captured from Iraqi troops, the sources said.

Most estimates of the number of Chinese arms in Iran range from 50 to 100. According to one European analyst, China already has sold 100 of the 1950s jets to Iran. He said about 300 North Korean advisers had been sent to Tehran to help install equipment arriving in Iran by ship from Pyongyang.

Beijing has kept the weapons deals with Iran secret to avoid alienating the Arab world and to protect it from charges of prolong-

ing the conflict, sources said. Publicly, China backs mediation efforts and denies selling arms to either side.

A recent study by the Stockholm International Peace Research Institute said that China had supplied major weapons to both Iran and Iraq during the course of their war.

An administration source in Washington said that Chinese military sales to both combatants appeared to be continuing. The source said Chinese arms sales to Iraq in recent months were reported to be smaller in total volume than those to Iran, but that hundreds of millions of dollars worth of Chinese weapons are believed to have been supplied to the Baghdad regime through Arab countries friendly to it.

"It is a sheer rumor to say that China sells arms to Iran through North Korea," the Chinese Foreign Ministry said last week. China officially has claimed to maintain "strict neutrality" in the war.

But informed military analysts said that behind this denial lies a complex military relationship between China and Iran designed by Beijing to reap large foreign exchange earnings for its domestic modernization program and to assure it an influential role in the Gulf after the war.

"The Chinese don't want to be (Continued on Page 2, Col. 3)

Pinochet Losing Ground to Opposition in Chile

By Jackson Diehl

Washington Post Service

SANTIAGO — Unable to overcome a broad opposition movement in Chile, President Augusto Pinochet appears to be losing political ground to continuing national protests, growing violence and discontent among his political and military supporters.

After a tentative move last year toward liberalization of his 10-year-old rule, General Pinochet responded to mass demonstrations last month by returning to tactics of repression. Reimposing a state of emergency, the government used a curfew and thousands of police and troops against protesters and restored press censorship.

The military's new crackdown, however, seems to have brought its veteran commander-in-chief only limited gains.

Although General Pinochet argued that the tough measures effectively limited disturbances on a national day of protest March 27, thousands of people defied security forces and the curfew to barricade streets, march and block traffic. At

least eight people were killed in two days of violence.

The security measures were sharply criticized by General Pinochet's traditional supporters on the political right. Opposition leaders, meanwhile, had new basis for their contention that the 68-year-old president, who has vowed to remain in office until at least 1989, has no real intention of carrying out the transition to democracy he has repeatedly promised.

"The government has shown that it is exhausted and failed," argued Gabriel Valdés, president of the centrist Christian Democratic Party and of the opposition Democratic Alliance, a grouping of five political parties outlawed since the 1973 coup. "There can be no doubt that Pinochet does not have the least intention of moving toward democracy as the Western world understands it."

Since May 1982, an opposition movement based in political parties and labor unions has sought to force General Pinochet's resignation and return Chile to democracy. The general has alternately responded with harsh repression and

efforts at conciliation with moderate critics. But neither side has been able to form alliances or mobilize sufficiently to force a solution to the crisis.

Over the last several months, violence by militants of the left and right has dramatically increased. More than 130 bombing incidents were reported in the first three months of this year.

Days before last week's protests, a top Christian Democratic opposition leader, Jorge Lavandero, was attacked and severely beaten by a group of men in civilian clothes.

"With the political stalemate, we are beginning to see all the elements of a great tragedy," said Genaro Arriagada, a Christian Democrat and political scientist. "There is no political outlet, and so the climate of violence is growing."

The violence has strengthened opposition arguments that General Pinochet can no longer control the country.

Erratically shifting between hard-line and liberal policies, hinting at decisive steps in both directions, General Pinochet has proved

unwilling so far to commit himself to either course.

The result, critics say, has been a kind of governmental paralysis that has produced neither the liberalization called for by rightist government supporters or the full crackdown that would mean a decisive confrontation with opponents.

"Pinochet is sufficiently smart to know that a crackdown would weaken him a lot," Mr. Arriagada said. "But he also knows that he can't deliver a liberalization without creating a country that would be ungovernable for him. And so he cannot act."

These shifts have sometimes left members of his government behind. On Monday, General Pinochet replaced his finance and economy ministers, the fourth cabinet change in less than a year.



General Augusto Pinochet

Earlier this year, the navy and air force chiefs serving on the four-member military junta blocked a Pinochet proposal for a referendum that would allow congressional elections in 1987, rather than 1989. The air force commander, Fernando Matthei, later indicated that he believed the end of military

rule, and not just elections for a congress, should be advanced.

The junta has also convulsed delayed action on two other major proposals by General Pinochet, including a scheme for calling occasional referendums and "consultations" of voters and a tough "anti-terrorism" law with mandatory death penalties.

INSIDE

■ The U.S. is seeking funds for a new test site to expand its nuclear program. Page 4.

■ An ecological disaster said to be the Soviet Union's worst has left officials with a difficult clean-up problem. Page 8.

■ BUSINESS/FINANCE

■ Royal Dutch/Shell said it was raising its bid for Shell Oil Co. to \$58 a share from \$55. Page 17.

■ The builder of the Seabrook nuclear-power plant in New Hampshire may have to file for protection from its creditors if it does not find more credit within three weeks. Page 17.

SPORTS

■ Georgetown defeated Houston, 84-75, Monday night to win the National Collegiate Athletic Association basketball title. Page 23.

A SPECIAL REPORT

■ Planning an ideal office may mean increases in profitability and efficiency. Office Automation. Page 9.

Mondale and Hart Battle For Delegates' Loyalties

Candidates Now See Convention Floor And Votes of Uncommitted as Crucial

By Milton Coleman

WASHINGTON — Anticipating that the Democratic presidential primaries may end indecisively in June, Walter F. Mondale and Senator Gary Hart have launched campaigns for the loyalties of delegates already chosen for July's Democratic National Convention in San Francisco.

Both sides are contemplating what was once considered an impossibility: a brokered convention. Not only are the candidates in a stalemate in the primaries and caucuses, but this year for the first time all delegates will be free from the start to ignore their pledges of support and vote for any candidate they choose.

Although more than 40 percent of the 3,933 delegate slots have been apportioned, neither Mr. Hart nor Mr. Mondale has apparently developed a strategy for dealing with possibly the key broker, the Rev. Jesse L. Jackson.

The battle for delegates' votes reflects the standoff of the candidates so far. Each has won claim to a distinct portion of the Democratic and independent electorates but has been unable to expand significantly into the other's. A virtual second campaign has begun for the delegates, and at times the rhetoric appears aimed as much at them as at the voters in the next round of primaries and caucuses.

Mr. Mondale tells his audiences that he has deep roots in the Democratic Party, that he is a more "sure-footed" and experienced candidate, the kind, his aides argue, that Democratic candidates at all levels would prefer to have heading the ticket in November.

"When we get to San Francisco, there are very few Democrats... who would not be fully prepared to support a Mondale nomination," said Mr. Mondale's campaign chairman, James A. Johnson.

But Mr. Hart reminds listeners that he is the candidate most consistently supported by the independent and suburbanites who rejected the Democrats in 1980. "The issue," he says, "is not who is Mr. Democrat. The issue is who has the best chance of defeating Ronald Reagan."

The Mondale organization has the apparent advantage of experienced operatives who helped write the party's new delegate-selection rules and advised other candidates on filing their delegate states. Campaign officials said 15 staff members have been assigned to track delegates already selected.

Mr. Mondale also is planning

strong follow-up efforts in states that have had first-round caucuses and are nearing delegate selection, such as Iowa, Mississippi, Arkansas and South Carolina. The aim is not only to retain Mr. Mondale's strength but to win uncommitted participants and those pledged to candidates who have dropped out.

Like the Mondale organization, Mr. Hart's aides are loading computers with data on all delegates selected in primaries and caucuses so far, urging field workers to contact them and banking that some of Mr. Mondale's support is soft.

Although Mr. Hart trails Mr. Mondale by nearly 300 delegates, his strategists hope to "backload" delegate support as the contests generally move west toward the Colorado senator's base and as primaries that award bonus delegates to winners come into play.

"In essence... if you're behind in a delegate count, the process allows you to catch up and surpass the leader," said Michael N. Levy, a Yale University political science student on leave to run the Hart effort for delegates. "By the time you get down to California, it's going to be a battle for the nomination and a battle for every single delegate." The California primary is June 5.

Of the 1,630 delegates chosen so far, Mr. Mondale has 729, Mr. Hart 440, Mr. Jackson 101, Mayor Harold Washington of Chicago, a city favorite son, 35, and 325 are uncommitted. There were 252 delegates at stake in Tuesday's primary contest in New York, for which earliest results were not available until after midnight GMT.

Clearly in command of a mushrooming black vote, Mr. Jackson already has surpassed predictions of pessimists who said before he entered the race that he would get less than 100 delegate votes. With several large primaries still to be held in states with significant pockets of black voters, including New York, Pennsylvania, Maryland, North Carolina and Louisiana, Mr. Jackson's strategists believe that he could win as many as 125 to 150 delegates and go to the convention with a strong bargaining chip.

"At the convention, Mondale and Hart will need every delegate they can get," said Anita Bonds, Mr. Jackson's deputy campaign manager for field operations. "Jesse Jackson is bringing out people, people that are voting in the Democratic Party again, those needed to defeat Ronald Reagan."

Mr. Jackson will not be the only potential power broker at the convention. Key blocks in several states could remain uncommitted if the outcome remains uncertain.

Those who are uncommitted are only one potentially volatile portion of convention-goers. The other major block of delegates are the 568 elected and party officials, including 164 members of the House of Representatives and 27 U.S. senators already chosen. All will be unpledged, but some have stated their preferences.

Father of Marvin Gaye To Face Murder Charge

Compiled by Our Staff From Dispatches
LOS ANGELES — The father of Marvin Gaye will be charged with first-degree murder rather than manslaughter because "there was a significant lapse of time" between the two shots that killed the soul singer, prosecutors said Tuesday.

Deputy District Attorney Robert Schim said Marvin Gaye Sr., 70, would be formally charged and arraigned Wednesday and prosecutors said they will ask that bail be set at \$100,000.

Earlier Tuesday, police said Mr. Gaye had "pushed his father around pretty good" just before being shot to death in a dispute over insurance with the retired minister.

An autopsy showed that the singer, who would have been 45 on Monday, died Sunday of two gunshot wounds to the chest. A coroner's spokesman said results of routine toxicological tests would not be available for several days.

Police and lawyers, investigating Mr. Gaye's private life for clues to the killing, found that the singer was experiencing a number of problems. They found, among other things, that:

• Mr. Gaye owed more than \$300,000 in alimony payments to two former wives and was struggling with income tax problems.

• He was facing a six-figure assault and battery lawsuit filed Feb. 16 in Los Angeles Superior Court by a woman who said that he had beaten her several times in late 1982 and early 1983.

• Another lawsuit was pending against his son, Marvin Gaye Jr., 17, which arose from an automobile accident last June 25, involving a car owned by one of Mr. Gaye's companies and driven by the son.

Mr. Gaye's lawyer, Howard L. Rasch, said his client was having financial problems "related back to his problems with the [Internal Revenue Service] and his bankruptcy" of several years ago.

Also, Mr. Rasch said, "at times he had problems" with drugs, "but he was working at that and seemed to be doing well."

Mr. Gaye had won a Grammy Award in 1983 for his hit record "Sexual Healing" and had been

nominated for a Grammy again this year.

Lieutenant Robert Martin, chief of detectives for the Police Department's Wilshire Division, said Mr. Gaye's mother, Alberta, 71, had indicated that the shooting culminated a father-son dispute over an insurance policy. (UPI, LAT, AP)



The Rev. Jesse L. Jackson campaigning in Brooklyn before Tuesday's Democratic primary election in New York.

N.Y. Race Called Close As Voters Cast Ballots

Compiled by Our Staff From Dispatches

NEW YORK — As voting began Tuesday in New York state's Democratic presidential primary, Senator Gary Hart of Colorado and former Vice President Walter F. Mondale campaigned across New York City and both acknowledged that the balloting could be very close.

Mr. Mondale remained favored to win the primary election, considered one of the most important of the political season. It will divide up the state's 252 delegates to the Democratic Party's national nominating convention. Earliest results of the voting were not available before midnight GMT.

The former vice president took some last-minute swipes at Mr. Hart on Tuesday, criticizing the Colorado senator's "detached, nominal record" on civil rights.

However, with a new poll showing Mr. Hart gaining on him in the previous few days and the Rev. Jesse L. Jackson running a strong third, Mr. Mondale did not sound as confident as he did Monday night.

Mingling with commuters at a subway station, he asked them to "pause a moment" and consider "who would best be suited to take over."

Later, on a radio talk show, Mr. Mondale contrasted "my active involvement with civil rights" with Mr. Hart's "detached, nominal record."

The latest ABC News-Washington Post poll, released Monday night, showed Mr. Hart gaining slightly. The survey gave Mr. Mondale 40 percent support among New York Democrats likely to vote, against 32 percent for Mr. Hart and 23 percent for Mr. Jackson. Six percent said they were undecided.

That was drop of 1 percentage point for Mr. Mondale and a gain of 2 percentage points for Mr. Hart and 6 for Mr. Jackson over the same poll taken two days previously.

But the new poll covered the last three days before the primary, and interviews with 297 certain voters on Monday alone showed a nearly dead heat — Mr. Mondale with 37 percent, Mr. Hart with 35 percent, Mr. Jackson with 23 percent, and 5 percent undecided.

Going into Tuesday's contest, Mr. Mondale had 729 of the 1,967 delegates needed for nomination, while Mr. Hart had 440 and Mr. Jackson had 101. There are 325 uncommitted delegates.

Mr. Hart appeared at the Garden Nursery School, north of Co-

lumbia University. When asked how he would fare in Tuesday's voting, he noted that Mr. Mondale was supported by New York's most prominent Democratic politicians and said, "It's going to be close."

In a short speech at the day-care center, Mr. Hart said, "This country can afford to have the highest-quality day care and child care, whether federally financed, state-financed or privately financed, because if we don't, society will pay for that one way or the other down the road."

Mr. Jackson visited the Abyssinian Baptist Church in Manhattan with his brother, Charles, and mother, Helen. "The ultimate victory has already been won — we've won our self-respect," Mr. Jackson said from the pulpit.

The New York contest pitted Mr. Mondale's political endorsements and strong labor support in a heavily union state against a \$1-million media blitz by the Hart campaign and strong support for Mr. Jackson among New York City's blacks.

The stakes were high. In addition to awarding 252 delegates — the largest single prize so far — the outcome could provide crucial momentum for the winner in forthcoming contests in Pennsylvania and Texas.

For Mr. Jackson, who was predicting a record turnout among blacks, a strong showing could establish him as a major voice in Democratic Party politics.

An estimated 30 percent to 35 percent of the state's 3.5 million registered Democrats were expected to go to the polls.

In the closing hours of the often brutal verbal battle, Mr. Hart seemed to edge toward conceding a Mondale victory.

The Colorado senator moved away from his earlier predictions of victory and said he would consider a second-place finish the same as a victory.

Wisconsin also held a primary Tuesday, but it was to be a popularity contest with no impact on how the state picks its delegates. Wisconsin Democrats are to begin caucuses Saturday to determine how to divide up the first 53 of the state's 89 convention delegates. (AP, UPI)

Man Hurt in Paris Explosion

The Associated Press
PARIS — A 25-year-old man belonging to the Church of Scientology was seriously injured Monday night when a bomb exploded at the entrance to the building in which the church is located, police said.

NATO's Naval Leaders Debate 'First-Fire' Rule

By Drew Middleton

New York Times Service
NEW YORK — Naval leaders of the North Atlantic Treaty Organization are debating whether to change an element of the rules of engagement to permit NATO ships to open fire first if threatened, alliance officials say.

At present the alliance's ships are restricted to returning enemy fire, in keeping with NATO's defensive strategy.

Alliance officials in the United States and at headquarters in Brussels emphasize that the present rules of engagement invite attack in an era of long-range, highly accurate missiles. One official said a naval commander is not now allowed to order a pre-emptive strike and is not even permitted to deploy his ships in combat formation until after he has been fired upon.

The alliance is divided over the question. Admiral William Staveland of Britain, the commander-in-chief for the English Channel and the southern North Sea, and Admiral Wesley McDonald, NATO's supreme Atlantic commander, are said to be pushing for a change in the engagement rules. Admiral McDonald said he did not wish to comment on the dispute.

British and U.S. officials are said to believe that the present rules make alliance fleets easy targets for a pre-emptive strike by Soviet missiles and bombers, which can attack from long range.

West German, Canadian, Danish and Dutch naval leaders are said to oppose any change. Their argument is that firing the first shot would be a serious departure from alliance principles.

Behind the debate lies a growing uneasiness about the security of the North Atlantic sea lanes in any conflict with the Warsaw Pact nations. The Soviet Union's naval building program, intelligence officials say, suggests that sizable Soviet squadrons would be at sea at the outbreak of war and that they would not hesitate to fire on allied naval ships and merchantmen.

Another suggestion being discussed in NATO is the creation in a crisis of "maritime exclusion zones" comparable to the zone established by Britain around the Falkland Islands in 1982. Once the zones were created and potential enemies notified, NATO ships would be free to fire on any hostile ship entering such a zone.

A spokesman for the alliance's military committee said the U.S. and British admirals had submitted the proposal for revising the rules of engagement. The next step, he said, would be staff consultations. Any revision adopted by the committee would require the approval of all NATO governments.

Diplomats familiar with the problem say they are not optimis-

tic. They suggest that in the present political environment in Western Europe, governments would be reluctant to approve any change that might appear to indicate NATO aggressiveness. Unless the environment changes, they said, it might take months or years for some governments to act upon the proposal.

NEWS ANALYSIS

might appear to indicate NATO aggressiveness. Unless the environment changes, they said, it might take months or years for some governments to act upon the proposal.

Reagan Considers Dropping Aid Bill If Congress Curbs Assistance to Turkey

By Don Oberdorfer

Washington Post Service
WASHINGTON — The Reagan administration is considering abandoning efforts to enact a foreign aid bill this year if Congress insists on restricting U.S. aid to Turkey along lines tentatively adopted by the Senate Foreign Relations Committee, according to congressional and administration sources.

The administration is seeking about \$15.4 billion in total foreign aid appropriations for 1985.

A senior State Department official said Monday, "If the bill gets loaded down with too many unacceptable amendments, there would be no interest in going forward. Certainly, the Turkish amendment is one we'd like to see corrected."

Another high-ranking State Department source said, "I doubt the administration would go forward with a major program encompassed in this way. That official said a committee amendment restricting U.S. aid to Pakistan also might sink the foreign aid bill."

"We need both changed" or the administration might decide on a continuing resolution that would keep aid at last year's levels without the restrictions, the official said.

The Turkish amendment, adopted Wednesday by an 11-7 vote that surprised the administration,

These governments, the officials said, would probably cite the policy announced at a 1982 NATO meeting in Bonn that says, "None of our weapons will ever be used except in response to attack."

But the present debate, naval sources said, is not over giving a naval commander the right to instigate a war. Rather, he said, it is about precautionary measures, including "first fire," that would en-

able a squadron commander to save his ships. Many naval officers feel that under the present restrictions a NATO force could be destroyed "before the commander knew hostilities had begun."

Such an attack would be helped for Warsaw Pact navies by the shadowing of NATO naval forces by Soviet intelligence-gathering ships. These ships keep watch on all major NATO naval deployments.

would withhold \$215 million in U.S. military grants to Turkey until Turkish Cypriots withdraw from a village they have occupied on Cyprus.

The Turkish government as well as Turkish Cypriots have denounced the requirement as an intrusion into their affairs. State Department officials expressed the view that withdrawal from the village, Varosha, might be possible but not under that kind of pressure.

A State Department spokesman described the amendment as "punitive action" against Turkey.

The amendment, backed by several organizations of Greek-Americans, has touched off a struggle on Capitol Hill similar in some respects to the one in 1974 that led to congressional imposition of an arms embargo against Turkey. The embargo was lifted in 1978 as the result of a strenuous effort by the Carter administration.

Senator Joseph R. Biden Jr., a Delaware Democrat, one of the sponsors of the amendment, said he considered administration threats to jettison the entire aid bill an effort to "peel off" some of those who backed the Turkish restrictions last week.

The chairman of the committee, Senator Charles H. Percy, an Illinois Republican, was among those

9 Neo-Nazis Imprisoned After a Trial in Austria

Reuters
VIENNA — Eight Austrians and a West German were imprisoned Monday night for terms ranging from three months to five years after a Vienna court found them guilty of engaging in neo-Nazi activities.

The longest sentence went to the West German, Ekkehard Weil, 33, who was also charged with instigating bomb attacks on Jewish-owned textile shops in Salzburg and Vienna, and similar attacks on the Vienna homes of prominent Jews.

Daily News in English
with highlights from the International Herald Tribune
Morning
from 8:45 to 9:45 a.m.
Evening
from 10:00 p.m. to 2:00 a.m.
RADIO KLOV
92.8 FM, Paris
English-language station.
Tel: 563.87.97

SKY FROM SATELLITE CHANNEL TELEVISION
PROGRAM, WEDNESDAY 4th APRIL

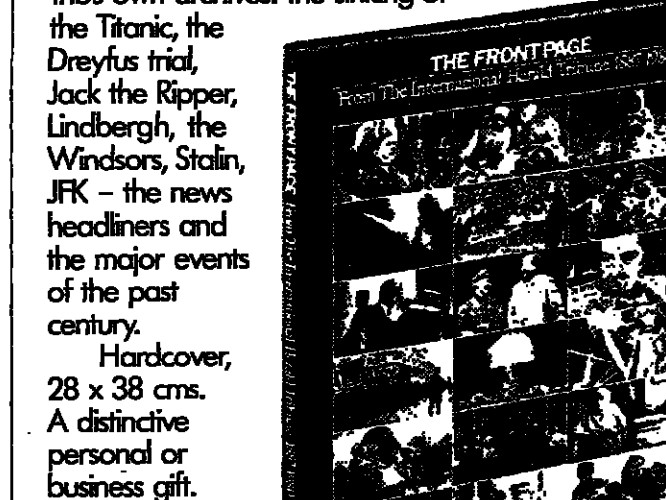
UK TIME	16.00	18.00	18.05	18.55	20.15	21.15	21.35	21.55
	SKY CHANNEL MUSIC BOX	CARTOON TIME	FANTASY ISLAND	SOMEBOODS STOLEN OUR RUSSIAN SPY	THE NATURE OF THINGS	WAYNE & SHUSTER	PRAIRIE SLOUGH	SKY CHANNEL MUSIC BOX

BROADCASTING TO CABLE COMPANIES IN EUROPE & THE UK VIA SATELLITE
CONTACT SATELLITE TELEVISION FOR FURTHER INFORMATION
TELEPHONE: LONDON (01) 439 0491 TELEX 266943

Herald Tribune ORDERING BY MAIL FROM OUR BOOK DIVISION IS AS EASY AS 1-2-3.

1. THE FRONT PAGE 1887-1980

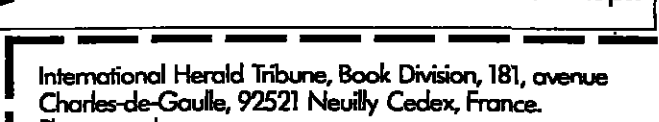
Reproductions of 129 front pages from the Trib's own archives: the sinking of the Titanic, the Dreyfus trial, Jack the Ripper, Lindbergh, the Windsors, Stalin, JFK — the news headlines and the major events of the past century.



Hardcover, 28 x 38 cms. A distinctive personal or business gift.

2. I.H.T. GUIDE TO BUSINESS TRAVEL & ENTERTAINMENT: EUROPE

Turn an ordinary business trip into a pleasant, more efficient journey. Covers Amsterdam, Brussels, Copenhagen, Dusseldorf, Frankfurt, Geneva, London, Lyon, Milan, Munich, Paris, Stockholm, Zurich. Written for the Trib by journalist Peter Graham. Hardcover edition, with orientation maps.



A guide to offbeat musical sites, helpful addresses, ticket-buying, information on music museums, major festivals. Little-known sites and anecdotes from the lives of composers, travel advice on 23 countries, a concert-going glossary in English, French, German, Italian. Hardcover edition.

- International Herald Tribune, Book Division, 181, avenue Charles-de-Gaulle, 92521 Neuilly Cedex, France. Please send me:
1. copies of THE FRONT PAGE at \$37 each, plus postage: add \$2.50 each in Europe, \$8 each outside Europe.
 2. copies of I.H.T. GUIDE TO BUSINESS TRAVEL & ENTERTAINMENT: EUROPE at \$16 each, plus postage: add \$1.50 each in Europe, \$4 each outside Europe.
 3. copies of MUSIC LOVER'S EUROPE at \$16 each, plus postage: add \$1.50 each in Europe, \$4 each outside Europe.

Please check method of payment:
☐ Enclosed is my payment. (Payment can be made in any convertible European currency at current exchange rates)
☐ Please charge to my VISA card

N° _____ Exp. date _____
Signature _____
(necessary for VISA card purchases)
Name _____
Address _____
City/Code/Country _____ 4-4-84

COME TO SHERATON

WHEN IT COMES TO BUSINESS

Knowing where you're going is knowing where to stay. And in these cities in North America, that can only mean Sheraton.

CHICAGO, SHERATON INTERNATIONAL AT O'HARE
LOS ANGELES, SHERATON GRANDE; SHERATON PLAZA LA REINA
MONTREAL, LE CENTRE SHERATON MONTREAL
NEW YORK, ST. REGIS SHERATON
TORONTO, THE SHERATON CENTRE OF TORONTO
WASHINGTON, D.C., SHERATON CARLTON

Sheraton
Hotels, Inns & Resorts Worldwide
The hospitality, people of IIT

For reservations, call your nearest Sheraton Hotel, Reservations Office, or your Travel Agent
© 1984 The Sheraton Corp

U.S. Preparing New Test-Site Area For Expanding Nuclear Program

By Walter Pincus
Washington Post Service

WASHINGTON — The Department of Energy is seeking funds to prepare a new area at its Nevada test site for larger underground nuclear tests as part of a long-term, \$3-billion program to expand facilities in the nation's nuclear armory, according to budget material for the 1985 fiscal year that has been sent to Congress.

The eight-year program, outlined in the department's request for \$7.8 billion this year for military programs, also calls for a doubling of some key facilities where nuclear warheads are assembled.

Most of the increased spending, the budget documents say, is for preparation for additional underground tests as part of President Ronald Reagan's so-called "Star Wars" plan to develop a space-based defense against Soviet ballistic missiles using laser or particle-beam weapons. One plan being explored is to use X-ray laser beams generated by a nuclear explosion.

Among its projects, the Department of Energy is building nuclear warheads for the submarine-launched Trident intercontinental missile; two versions of the B-61 tactical bomb; the eight-inch neutron artillery shell; the cruise missile and the Pershing-2 medium-range missile.

It also is preparing for production of warheads for the land-based MX intercontinental missile; the sub-launched Trident-2 missile; and the ship-launched, anti-aircraft, Standard-2 missile, according to

the Energy Department presentation. The department's output of nuclear warheads, which is the highest it has been for 20 years, is expected to continue increasing over the next two years before leveling off, according to congressional sources.

The Reagan administration plan to prepare for future expansion of nuclear testing and production comes at a time when public debate over nuclear weapons policy, quiet since defeat of the freeze resolution in the Senate, appears ready to heat up again.

All three candidates for the Democratic presidential nomination — Walter F. Mondale, Senator Gary Hart and the Rev. Jesse L. Jackson — are calling for a freeze of weapons production and a temporary halt in weapons tests. On Capitol Hill, a bipartisan group of senators is preparing to push a resolution calling on Mr. Reagan to seek new negotiations with the Soviet Union to halt all underground testing.

At the same time, however, administration supporters are calling for an increase in testing, citing alleged Soviet violations of nuclear arms agreement and Moscow's buildup of strategic weapons over the past 10 years.

The expansion of facilities at the Nevada nuclear test site was recommended by a study completed two years ago, according to the Energy Department budget material. At that time officials determined that buildings at the site are 10 to 20 years old and "are now completely overage and deteriorated."

"Additional growth in employ-

ment and test levels in future years" may be needed for the president's strategic defense initiative, the documents say.

About \$30 million is programmed to develop an area called Pahute Mesa at the Nevada test site where "approximately 30" of the underground shots are to be conducted by 1985, according to the budget. An Energy Department official said that moving these larger nuclear test shots away from Yucca Flats, the location of most tests, was required because they had run out of space.

Another indicator of the planned increase in testing is reflected in the request to begin construction of \$3 million worth of assembly buildings and towers and \$3.5 million in additional living quarters at the Pahute Mesa test site.

A new \$57-million complex is being proposed to house major assembly and storage facilities at the Nevada site for the nuclear devices to be tested. Currently, Los Alamos National Laboratory and Lawrence Livermore National Laboratory maintain separate facilities at the site.

Not all the new construction, however, is geared to expanding underground nuclear tests. Work is proceeding on a \$39-million simulation technology laboratory, begun three years ago, which will give scientists the capability to create in a lab radiation effects such as those in a real explosion.



Sun Guiyang, left, and her family beside her newly purchased car in a Beijing suburb.

First Chinese Peasant Buys a Private Car

United Press International

BEIJING — A chicken farmer has become the first Chinese peasant to buy a private car, the newspaper Beijing Daily reported Tuesday.

The farmer, Sun Guiyang, paid the equivalent of \$4,650 for a new Japanese Toyota. Mrs. Sun, a member of a suburban Beijing commune, sold

70,400 pounds (31,916 kilograms) of eggs last year and made a profit of \$18,500. The average worker earns less than \$50 a month.

Peasants like Mrs. Sun, who a few years ago would have been denounced as greedy capitalists, are now portrayed as models of success through private

enterprise and other capitalistic reforms launched by China's leadership.

Beijing Daily published a front-page picture of the smiling farmer and her family standing in front of their new silver-colored car, which it said they would use to "help make business contacts and promote egg sales."

U.S. Senate Rejects 2 Plans to Limit Salvador Aid

By Joanne Omang
Washington Post Service

WASHINGTON — The Senate has twice reaffirmed its decision to provide \$62 million in emergency military aid to help the government of El Salvador fight leftist guerrillas, moving the compromise package another step toward enactment.

But many amendments are pending that would block all or part of the aid by attaching stiff conditions, and debate has not begun on a provision for \$21 million to help rebels fighting the Nicaraguan government. A final vote on the entire bill could be delayed until next week, and a fight is expected in the House.

The Senate's first vote Monday rejected, 63-25, an amendment proposed by Senator Edward M. Kennedy, a Massachusetts Democrat, to reduce the aid to \$21 million, with 14 Democrats joining the opposition.

The second vote, 63-24, defeated a proposal by Senator John Mel-

cher, a Montana Democrat, to cut the aid to \$35.4 million.

Only two Republicans, Lowell P. Weicker Jr. of Connecticut and Mark O. Hatfield of Oregon, voted for both proposals.

The Senate passed by voice vote a Kennedy amendment unrelated to the military aid package that would provide \$7 million to help Salvadoran refugees resettle in the United States.

Senator Daniel K. Inouye, a Hawaii Democrat, said he sponsored the compromise package to trim the Reagan administration's original request of \$93 million, because \$62 million is "just enough to keep the military in line, just enough... for this possible democracy to develop."

He said he feared that the full \$93 million would be provided, either by the Republican-controlled Senate or through the administration's emergency appropriation powers, if no compromise was found.

"You can kill more people with

\$93 million than with \$62 million," he said.

"I could be on your side supporting \$21 million, but we would lose," he told Senator Kennedy.

"All of us here have over the years participated in building a military monster" in El Salvador, he said, and a total aid cut would "be a signal to unleash the hordes" in the Salvadoran death squads.

"I don't want that on my conscience," he said.

Senator Melcher argued that the Reagan policy has no support except in Washington. "We're squandering tax dollars for purposes that have no good goal," he said.

Senator Kennedy attacked the administration's argument that the worst policy is to give aid to El Salvador but not enough to defeat the leftist guerrilla insurgency. "This is precisely the kind of argument that kept this nation in Vietnam," he said, "and precisely the kind of argument that will bring U.S. troops into conflict in El Salvador."

He urged Congress to provide

only \$21 million, enough to supply Salvadoran needs through the end of May, when the results of presidential runoff elections there will be known.

"I don't think the U.S. Senate or the American people want to give millions of dollars in aid to a government headed by Roberto d'Aubuisson," he said. Mr. d'Aubuisson, one of the two candidates for president of El Salvador, has been accused of involvement in the death squads.

Senator Jim Sasser, a Tennessee Democrat supporting Senator Kennedy's proposal, noted that even if Mr. d'Aubuisson's opponent, former President José Napoleón Duarte, should win, "there have been persistent rumors of a military coup" to unseat him.

In the first round of El Salvador's presidential elections March 25, Mr. Duarte won 43.4 percent of the vote, compared with Mr. d'Aubuisson's 29.8 percent. The runoff is expected to be scheduled for April 29 or May 6.

Trilateral Group Report On Defense, Economy Rouses Some Objections

By Hobart Rowen
Washington Post Service

WASHINGTON — Authors of a Trilateral Commission report calling for Europe and Japan to assume a greater share of the global costs of military and economic aid as a trade-off for a sharp reduction in the U.S. budget deficit concede there is little chance that the London economic summit meeting in June would follow such recommendations.

But the former British foreign secretary, David Owen, one of three authors of the report, said at a press conference Monday that "a system of trade-offs" is the practical political way to solve the problems. He said he hoped that the London conference June 7-9 would "set on track" an agenda that would begin to solve the problems in 1985 and 1986.

Mr. Owen, along with Saburo Okita, the former Japanese foreign minister, and Zbigniew Brzezinski, the former national security adviser to President Jimmy Carter, said that the economic summit meetings also should be transformed into "policy summits."

Mr. Brzezinski said that U.S. policy was "polarized" in Central America and "paralyzed" in the Middle East. In those areas, he said, "European and Japanese inputs" at a summit meeting would help the United States.

The report, titled "Democracy Must Work," was the main topic of a daylong meeting of the commission, a group of American, European and Japanese businessmen and former government officials. The group was created in 1973 to bring Japan into closer relationships with the United States and Europe.

Some of the report's recommendations were privately challenged by many of the 200 commission members and guests.

A proposal that "target zones" be established for exchange rates to limit fluctuations among the dollar, mark and yen was criticized by the managing director of the International Monetary Fund, Jacques de Larosiere, who said it would be better to stay with the current system of floating exchange rates.

A recommendation that Japan increase military and economic support of the West was disputed.

Shuttle Countdown to Start

United Press International
CAPE CANAVERAL, Florida — The countdown is to begin Wednesday for the launching Friday morning of the space shuttle Challenger on its fifth mission.

And a suggestion that Japan increase its contribution to the World Bank's International Development Association by \$3 billion was termed "impossible" by participants close to the Japanese government.

But there was general agreement among Japanese and other participants that Japan should increase its economic aid to the Third World in various ways.

Among the most contentious areas of the report was the assessment that Europe lags behind the United States and Japan in technological progress. To deal with its huge unemployment problem, the report said, Europe should move to "more extensive job-sharing or part-time working."

Some of the members warned that the proposal could be taken as a recommendation for a 35-hour week, and that it was the wrong solution because it would raise unit costs for labor and worsen Europe's ability to compete with North America and Japan.

Schmidt Says U.S. Endangers Peace With Arms Race

United Press International

COLLEGE PARK, Maryland — U.S. efforts to achieve military superiority over the Soviet Union endanger peace and could "explode the European-American alliance," according to former Chancellor Helmut Schmidt of West Germany. Mr. Schmidt, speaking Monday before a University of Maryland audience, said U.S. and Soviet officials should urgently negotiate stronger nuclear-control agreements to end a "highly dangerous" weapons race that has caught Europe in the middle.

"Any attempt to secure superiority could explode the European-American alliance," said Mr. Schmidt, who served as the West German chancellor from 1974 to 1982. "If you strive for superiority, there's no chance of arms limitations."

West Germany was the scene of demonstrations last fall against the deployment of U.S. nuclear missiles in Western Europe.

Mr. Schmidt, recalling a meeting four years ago with Ronald Reagan, then a presidential candidate, said he believed Mr. Reagan's pledge to "negotiate, negotiate, negotiate" with the Russians. "But I must admit I have [since] had doubts," Mr. Schmidt said.

From the world, to you,
at home or in your office.
And at a bargain price!

If you purchased this Trib at a newsstand, you're already enjoying a rare bargain — the whole world in just a few tightly-written, fact-packed pages.

But why not double your bargain by subscribing to the International Herald Tribune and saving up to 42% off the newsstand price? With our low-cost subscription rates, you can double your value and enjoy almost twice as many Tribs, and each for a price which is no more than you have to pay for a cup of coffee.



Think of it. The combined editorial product of hundreds of the world's finest journalists in every corner of the planet — available to you for such a relatively modest expenditure.

Subscribe now, and we'll speed bargain price Tribs to your home or office day after day.

Just fill out the coupon below and mail. For maximum savings, subscribe for a full year. This cut-price subscription offer is for new subscribers only.

Please circle below the reduced subscription price selected. For new subscribers only. (Rates valid through April 30, 1984).				
Country	Currency	1 year	6 mos.	3 mos.
Austria	A. Sch.	3,090	1,525	840
Belgium	B. Fr.	6,600	3,300	1,815
Denmark	D. Kr.	1,400	700	400
Finland	F. M.	1,080	540	300
France	F. F.	900	450	250
Germany	D. M.	400	200	110
Great Britain	£	72	36	20
Greece	Dr.	10,800	5,400	2,950
Ireland	£. Ir.	90	45	25
Italy	Lire	195,000	97,500	53,700
Luxembourg	L. Fr.	6,600	3,300	1,815
Netherlands	Fl.	450	225	124
Norway	N. Kr.	1,160	580	320
Portugal	Esc.	10,000	5,000	2,750
Spain	Ptas	16,280	8,130	4,490
Sweden	S. Kr.	1,160	580	320
Switzerland	S. Fr.	356	178	98
The rest of Europe, North Africa, former French Africa, U.S.A., French Polynesia, Middle East				
	\$	280	140	77
Rest of Africa, Canada, Latin America, Gulf States, Asia				
	\$	390	195	107

To: Subscription Manager, International Herald Tribune, 181 avenue Charles de Gaulle, 92521 Neuilly Cedex, France. Tel: 747.12.65. Tlx: 612832.

Yes, I would like to accept your bargain offer. Please send me the International Herald Tribune for the time period and at the reduced price circled on this coupon.

☐ My payment is enclosed (Check or money order to the IHT). Please charge my:

☐ Access ☐ American Express ☐ Diners Club ☐ Eurocard ☐ Mastercard ☐ Visa

Card account number:

Card expiry date

My name Signature

Address

City

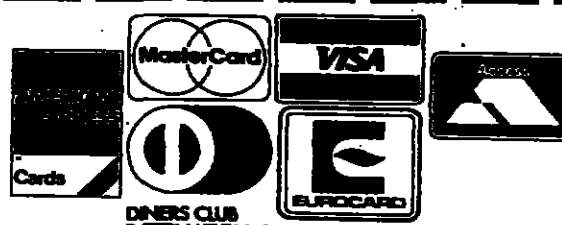
Country

Job/Profession

Nationality

Tel. N°

Company Activity



35

of resident listed in the Who are re International

A recent survey continental E International newspapers magazines, Moreover, 3 International more than rec in the English

Important

هكذا للأصل

Union's First Lady Is Tough, Charming

New Leader of U.K. Printing Workers Forecasts More Trouble in Fleet Street

By R.W. Apple Jr.
New York Times Service

HADLEIGH, England — Years ago, when she was just starting as a trade union official, a business executive offered Brenda Dean a drink before they sat down at the bargaining table.

"I don't really drink much," she recalled recently, "but I didn't want to be impolite, so I asked for a sherry. He told me that I was doing a man's job, and I would have a man's drink, a whiskey, or nothing. I answered that if that was any sign of his intelligence, I'd have no trouble running rings around him in the negotiations."

The incident seemed to demonstrate both the charmingly understated side of Miss Dean's personality and the toughness that she summons with equal ease when she feels it is needed. The combination has stood her in good stead, and two weeks ago she was elected over six men to the new general secretary of the Society of Graphical and Allied Trades, the biggest union in the British printing industry.

When she takes over next year, she will be the first woman ever to head an industrial union in this country, and, at 40 years of age, she



Brenda Dean

will be the youngest leader of a major union in Britain.

Miss Dean, who worked briefly for the Salvation Army before starting as a typist at age 16, has been a full-time employee of her union since 1975. To her work, said a friend, "Brenda brings an unusu-

al asset: She actually listens to what people say." She also has an unusually retentive memory for arcane facts and figures.

An industrial-relations executive said after a nightlong negotiation with her, "I knew I had been hit, but I never felt the bullet."

Sogat, as the union is universally known, represents clerical workers and pressmen on Fleet Street, the home of many British newspapers, and others elsewhere in the printing industry. Along with the National Graphical Association, the major printers' union, it has been embroiled for more than a decade in battles with national newspapers that have given Fleet Street a reputation for having the worst labor relations in European journalism.

The unions have resisted the introduction of labor-saving technology and have been accused of outrageous featherbedding.

Miss Dean said at her union's headquarters in Hadleigh, a small, Thames estuary town, that she expected more trouble in the next few years "because people's jobs are threatened, and when that happens, there is resistance to change, fear and friction." But she said there was no doubt that change would come very soon.

"We have to find a reasonable solution, through reasonable discussion, rather than confrontation," Miss Dean said. "We can't continue to turn our face against the introduction of new technology. At the end of the day, and the industrial history of this country shows it very clearly, the unions will end up with less, not more."

When Miss Dean and Tony Dubbins, the newly elected general secretary of the graphical association, take over their new posts, a new generation will be in charge of the two principal print unions. They are already discussing a merger that would unite 350,000 workers.

The association has always opposed "single keystriking," the system, already widely used in the United States, whereby journalists and ad-takers write on video terminals linked to automatic typesetting equipment. But it has begun to edge away from that view recently.

Miss Dean said the essentials to an agreement are restraining programs and sharing job losses among all unions involved.

Although 40 percent of the members of the 96 unions affiliated with the Trades Union Congress are women, only 3 percent of the unions' full-time employees are women. The whole culture of the British trade union movement — the beer, the jokes, the songs, the sentimental links to the mines and the railroads where it all began — is resolutely masculine.

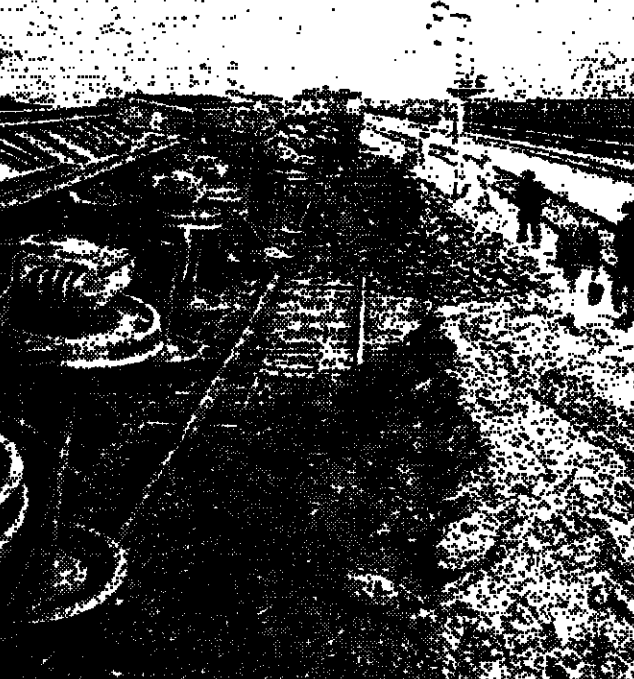
But Miss Dean says she has never felt any inhibitions about doing her job, even when, making her first speech to a national conference, she was heckled and distracted by men.

"I'm a trade unionist who happens to be a woman," she said. "I think women are just as good and just as able as men. I believe in equal pay for equal work, and that's about as far as it goes."

She does not describe herself as a feminist, Miss Dean said, even though she sympathizes with most of the feminist movement's goals, such as abortion on demand.

She said that many "hard-line feminists" in her view, want to supplant men rather than work alongside them.

Twice Miss Dean has turned down chances to run for a seat in the House of Commons for the Labor Party. But she concedes that she has not completely ruled out the idea of a political career.



French steelworkers dismantled several train cars in Lorraine.

Mitterrand Being Pressed To Drop Steel Reforms

PARIS — President François Mitterrand was under increasing political and union pressure Tuesday to back down from his government's plan for a drastic reform of the steel industry.

Steelworkers held sporadic demonstrations, and union leaders prepared for a 24-hour strike Wednesday in the eastern Lorraine basin. A group of steelworkers blocked a main road between Longwy and Thionville, and others poured 150 tons of iron ore onto a rail track at the village of Pont-Saint-Vincent.

The government's plan for reform involves the elimination of 25,000 jobs over four years.

The leader of the Communist Party, Georges Marchais, called the plan a tragic mistake and urged Mr. Mitterrand to reverse it. But he made clear that the Communists would not pull out of the government, in which they have four ministers.

"We will not give the right such a gift," he said in a television interview Monday night.

Mr. Marchais's opposition to the government's overall policy of modernizing the steel, coal, shipbuilding and automobile industries was a direct challenge to Mr. Mitterrand, commentators said.

Libération, a leftist daily, said Mr. Marchais and his party had virtually invited Mr. Mitterrand to throw them out of the government and had deliberately left such a decision up to him.

"If Mitterrand doesn't do it, he will admit his dependence on the Communists and let it be known that he still needs them," Libération commented. "If he ends the Communists' participation, he will be the one who takes the initiative for the rupture."

Commentators said Mr. Mitterrand needs the Communists on his side to keep the General Confederation of Labor, in line during the industrial modernization.

Mr. Marchais said Mr. Mitterrand should either reverse the steel

HOTEL METROPOLE
GENEVE

- Grand Luxe
- The Place to Stay
- The Place to Meet

34 Quai Général Guisan
1201 Geneva 3
Tel: (022) 211.13.44
Telex: 421.550

WORLDWIDE ENTERTAINMENT

12, av. George V tel. 723.32.32

PARIS - FRANCE

a new musical

"HAPPY CRAZY 84"

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

FRANÇOIS TRUFFAUT

Poland's Police Step Up Political Raids, Arrests

By Dan Fisher

WARSAW — Many hundreds of Polish families have been targeted in recent weeks by the most extensive police raids, searches and arrests aimed at the political opposition since the end of martial law last summer.

The government dismisses reports of a clampdown, but its own figures show that by last week the number of political prisoners in Poland had doubled since the end of last year. Official data, released by the government spokesman, Jerzy Urban, shows that most of the new arrests took place in February and the first three weeks of last month, a period when nearly 200 people were imprisoned for alleged anti-state activities.

There are no public statistics on searches and temporary detentions. But, Mr. Urban conceded, "One may assume from press reports that the security services have intensified their activities against illegal groups and their printing and distribution operations."

Although the underground press has been the focus of the crackdown, the arrests and searches seem aimed broadly at intimidating influential Poles who have refused to cooperate with the government's program of "normalization" of the country.

Priests, educators, writers, journalists and lawyers were among those in Warsaw targeted by the security forces.

For Magdalena Fikus, a biochemist whose husband is a journalist, the worst part of the experience was the day after the police came, when the intrusion was over and the mixture of fear and anger of the previous 24 hours gave way to a sense of hopelessness.

At that psychological low point, the day after her husband had been interrogated and their apartment searched for seven hours, she felt that something that had helped sustain the family even during the worst of martial law had been destroyed. That was the feeling of "at least being safe in our own home," the 48-year-old mother of two told friends.

The warrant for the search of the Fikus apartment cited Danusz Fikus's close relationship with Jacek Kalabinski, also a journalist. Mr. Kalabinski, a visiting fellow at Yale University in Connecticut since last fall, has been an outspoken

critic of Poland's Communist regime.

The campaign is not restricted to the capital. In the first half of March, according to sources in the underground Solidarity movement, there were at least 250 detentions, arrests and searches in the widely scattered cities of Wroclaw, Katowice, Poznan, Krakow and Konin. The security authorities have broken up underground groups in Tarnobrzeg, Gdansk and other towns, the official press has reported.

The police actions have coincided with a general tightening of ideological policy, such as the campaign against the display of crucifixes in schools, orders to cut back on broadcasts of Western programs on radio and television, and new curbs on publication of works by writers, such as the Nobel Prize-winner, Czeslaw Milosz, who are considered anti-socialist.

"We learned a lesson from the past, that weakness does not pay," a Communist official said.

"There is a dominant feeling," a journalist said, "that the system is returning to normal, that it can't be changed and that, in order to survive, one has to adapt."

Ironically, the latest moves to crush internal dissent have coincided with the release of two Western reports crediting the Polish authorities with improving the human rights situation in the country.

In its latest survey of political and civil rights worldwide, the New York-based Freedom House organization elevated Poland's status in January from "not free" to "partly free." Poland thus joined Yugoslavia and South Africa among countries in which Freedom House said that "the limits of liberty are currently being stretched."

And early last month a United Nations report by the undersecretary-general, Patricia Ruedas, described the human rights situation in Poland as encouraging and said that there were now "favorable conditions for a reconciliation between different sectors of Polish society."

It is not clear why the authorities have chosen to increase pressure on dissenters at this time.

Some Poles think it is designed to undercut opposition plans for a boycott of local elections scheduled for June. The government has characterized the elections as a major test of its efforts to re-establish the "leading role" of the Communist Party in all phases of public life.

Paper Says U.S. To Urge Soviet Athletes to Stay

MOSCOW — A Moscow newspaper said Tuesday that the U.S. authorities were planning to urge Soviet-bloc athletes to defect to the West when they compete in the Olympic Games in Los Angeles this summer.

The paper, Sovetskii Sport, said the U.S. State Department and intelligence services had prepared instructions for agents on how to persuade the athletes not to return home.

Special hiding places were being prepared for the athletes, the paper said.

It gave no source for its assertions, but said the defection plan tied in with a "noisy propaganda campaign" against Soviet athletes under way in the United States.

U.S. Army Sergeant Hurt In Gun Attack in Athens

ATHENS — Two gunmen on a motorcycle shot and wounded a U.S. Army master sergeant Tuesday as he drove along a main highway leading out of Athens, police and U.S. Embassy officials said.

Sergeant Robert H. Judd Jr., 36, was hit in his right hand and left shoulder when the gunmen fired at least three shots at him, police said. He was "in good condition" at a hospital, according to an embassy official, who spoke on the condition that he not be identified. A third bullet was found in his car, he said.

"He was shot in the wrist and in the back," the official said, "but he managed to keep on driving the car."

He said Sergeant Judd drove his station wagon to the U.S. Air Force base at Hellinikon Airport before collapsing.

He was taken to Athens Hgia Hospital where he was in "satisfactory condition," the spokesman said. A hospital spokesman said Sergeant Judd was undergoing an emergency operation.

Police said the gunmen escaped. The sergeant, married with two daughters, works as a mail officer at the Joint U.S. Military Advisory Group to Greece, a military aid

program established in the 1950s, the official said.

He was riding in a car on a main highway leading out of the city center when the attack occurred, the police said.

"He appears to have been alone in the car," one source said.

The embassy source said two men on a motorcycle drove up behind the sergeant's car and opened fire through the car window.

Last Wednesday, a gunman shot and killed Kenneth Whitely, 44, the assistant cultural representative of the British Council.

The gunman escaped, and no arrests were made in the killing.

Magazine Says Guardsmen 'Executed' Prisoners After Quelling Riot in Lima

LIMA — Autopsies on prisoners who took over a central Lima jail showed that most were shot at point-blank range, indicating they were executed by National Guardsmen who stormed the prison to quell the uprising, Caratas, a weekly magazine, said.

A professor held hostage died Monday of burns he sustained when prisoners doused him with gasoline and set him on fire in front of television cameras to press their demand for getaway cars.

The death of Carlos Rosales, who had taught inmates at El Sexto jail, brought to 23 the number of deaths from the May 27 uprising. The other 22 dead were prisoners, including some who had been taken hostage by their fellow inmates, and the leader of the uprising, who apparently committed suicide when the guardsmen retook the jail.

Caratas reported Monday that

Submachine Guns For U.K. Summit

United Press International

LONDON — British police officers guarding President Ronald Reagan and other leaders at a three-day economic summit in London starting June 7 will carry submachine guns for the first time, according to Scotland Yard.

The guns will be issued to combat "the general international terrorist threat," a statement from the police headquarters said Monday. The Home Office, the ministry in charge of the police, said "fewer than a dozen" officers would be issued with the weapons.

In addition to Mr. Reagan, Chancellor Helmut Kohl of West Germany, President François Mitterrand of France, and Prime Minister Bettino Craxi of Italy, Yasuhiro Nakasone of Japan and Pierre Elliott Trudeau of Canada, are expected to attend the summit.

In English: George V - UGC Rotonde - UGC Opéra - Chury Ecoles 14-Juillet Beaugrenelle - Cné Beaubourg-les-Halles

5 ACADEMY AWARD NOMINATIONS INCLUDING BEST PICTURE

BEST ACTOR
Albert Finney

BEST ACTRESS
Tom Courtenay

BEST DIRECTOR
Peter Yates

BEST SCREENPLAY
Ronald Harwood

THE DRESSER

L'HABILLEUR
What happens backstage is always true drama. And often pure comedy.

AGENCY: COLUMBIA PICTURES
A FILM BY ROBERT ALTMAN
AFTER VICTOR HUGO'S NOVEL
Starring ALBERT FINNEY - TOM COURTENAY
THE DRESSER
EDWARD FOX - ZENA WALKER - EILEEN ATKINS
MICHAEL Gough - CATHRYN HARRISON
Music Composed by JAMES NEWTON HOWARD
Screenplay by ROBERT ALTMAN Produced and Directed by PETER YATES

Dining Out

CAVEAU DES CHEVILLARDS
181 rue de Valenciennes, 75116 Paris 10. Tel. 422.77.08. Closed Monday, Tuesday & Sunday. Lunch-dinner-drinks support.

LA COLOMBE
4 rue de la Colombe, tel. 422.77.08. Closed Monday, Tuesday & Sunday. Lunch-dinner-drinks support.

AUBERGE DES 2 SIGNES
Authentic medieval setting with view of Notre-Dame. Closed Sunday. 46 rue Godefroid 1501 325.46.56

VIEUX METIERS DE FRANCE
Lunch-Dinner-Supper. 13 bd. Auguste Blanqui, Paris. Closed Sunday. Tel. 422.77.08. 13.44.56. English & German also spoken.

RESTAURANT BOULESTIN
Tel. 422.77.08. 13.44.56. 10 rue de Valenciennes. St. Germain, 75116. Lunch Mon-Fri 12-2.30. Dinner Mon-Fri 7-11.15.

INTERNATIONAL BUSINESS OPPORTUNITIES

EXCLUSIVE SALES AGENTS FOR RAFSANJAN PISTACHIOS

RAFSANJAN PISTACHIO PRODUCERS CO-OPERATIVE

WORLDWIDE DISTRIBUTION

INTERCONTINENTAL TRADING & CONSTRUCTION LTD

11 Cornwell Terrace, Regents Park, London NW1 4QP
Telephone: 01-486 2811 Telex: 812322 TFC G
Pistachio and Almond Nut Corp.
One World Trade Center, Suite 2565, New York, N.Y. 10048
Telephone: (212) 432-6000 Telex: WU1 6720011 CIF

Speak French
(or German, Spanish, Arabic and others)
Like a diplomat!

What sort of people need to learn a foreign language as quickly and effectively as possible? Foreign service personnel, that's who. You can learn the same way with the course designed by the Foreign Service Institute (FSI) for use by U.S. State Department personnel stationed abroad. The FSI BASIC French Course.

The basic French course consists of a set of audio cassettes and accompanying text books: you simply follow the written and recorded instructions. With the FSI's unique learning method you set your own pace — testing yourself, correcting errors, and reinforcing accurate responses. It is, we believe, the best course available to teach you a comprehensive knowledge of French.

The FSI's introductory Basic French course in two parts. Part A provides an introduction to the simpler forms of the language and a basic vocabulary. Part B introduces more complex structures and additional vocabulary.

You may order one or both courses.

Try the course for three weeks. If you are not convinced it's the fastest, easiest, most painless way to learn French, return it and we will refund every penny you paid.

TO ORDER, JUST CLIP THIS AD and mail it with your name and address and a check or money order. Or, charge it to your credit card (American Express, VISA, Access, Diners Club) by enclosing card number, expiration date, and your signature.

□ Basic French, Part A. 12 cassettes (16 hrs.), 150-page text. \$28.50 (or \$150 US).
□ Basic French, Part B. 18 cassettes (24 hrs.), 200-page text. \$39.50 (or \$175 US).
All prices are inclusive.
For shipment outside Europe, please include \$6 (or \$15 US) additional postage.
Many other FSI language courses also available. Write to us for free catalogue.

AUDIO-FORUM
Audio-Forum, Suite 311
31 Kensington Church Street, London, W8 5HL, England.
(01) 277 1747
Audio-Forum, Suite 311
145 West 49th St., New York, N.Y. 10017.
(212) 732 1782.

Would You Like To Carry An Aristocratic Title Or A Coat Of Arms?

A very limited number of highly valued aristocratic titles will be granted on the occasion of the Anniversary of the Coronation. If you are interested in obtaining a title that brings you prestige, connections, commercial success, please apply to:

International Herald Tribune, "Secretary of the Royal House"
Box 2003, Friedrichstr. 15
6000 Frankfurt/M., W. Germany.

PLANTS FOR SALE

- 1—Cement Plant 600,000 T.Y.P.R.
- 2—Manufacturing Co. of small landing gears and outcators "Real Jewels"
- 3—Manufacturing Co. of chemical process equipment.
- 4—Manufacturing Co. of mud pumps.
- 5—Polypropylene and oxo alcohol manufacturing facility.

S & S MERGER GROUP INC.
140 53rd Street
Brooklyn, N.Y. 11232
(212) 492-7400. Tel.: 127570. JAY SRYENIK

OSC OFFICE + SERVICE CENTER
INTERIM-BÜROS GMBH
Rothstr. 166 • D-4000 Düsseldorf 40
0211-450939 • Telex 8339321 osc d

INTERNATIONAL BUSINESS OPPORTUNITIES

Appears every **WEDNESDAY**

Max FERRERO
181, Ave. Charles-de-Gaulle, 92521 Neuilly Cedex, France. Tel.: 147.62.65. Telex: 613595.

35%

of resident continental Europeans listed in the International Who's Who are regular readers of the International Herald Tribune.

A recent survey shows that resident continental Europeans listed in the International Who's Who trust newspapers - two to one - over magazines, radio or television. Moreover, 35% of them read the International Herald Tribune... that's more than read any other publication in the English language.

Important people trust the Trib.

Herald Tribune

Published With The New York Times and The Washington Post

A Foreign Policy Auction

In the old days people used to say, "Politics stops at the water's edge." It was in part an admonition to candidates and incumbents not to play partisan games that could damage the pursuit of American interests overseas. But it was also in part a complacent excuse, as we were to find out when what had begun as a call to responsibility finally produced a kind of reflexive habit of taking the executive branch at its word and letting it have its way in foreign affairs, no matter what. Vietnam changed that.

Congress got back into the act. Politicians stopped thinking it was reckless or presumptuous or intrusive in a Joseph McCarthyish way to disagree loudly with a president's conduct of foreign affairs. Even acknowledging that there were plenty of excesses involved, over the years we have found this renewed assertion that foreign policy is a legitimate subject of political debate and congressional action a good thing. We still do — but just barely.

For the performance of the Democratic candidates in the past few weeks has begun to make us lonesome for the old platitudes about politics and the water's edge. Surely the pandering has sunk to new depths in this election. Is there any foreign policy position that Messrs. Mondale and Hart won't take for the sake of attracting a primary vote? Do they care how their words are received abroad as they frantically try to outbid each other? We realize that foreign policy is not being singled out for

special treatment by the candidates. On a broad range of domestic questions they appear to be just as undignified in their competition. We are not saying that argument, no matter how loud or tough, is undignified. The loss of dignity comes in what looks to be a near-hysterical willingness to take almost any position if one feels threatened in an exchange. On questions that affect the Middle East, U.S.-Soviet relations, arms control, military policy, the willingness of the United States to honor its commitments abroad — on all this the talk has often been fast and loose and, in some cases, downright stupid. It is saying things to Arabs and Central Americans and Europeans and Soviets that can in fact have a tremendous effect on how those peoples and governments see America and behave in relation to it.

Democratic government comes at a price, especially where the consistent, effective conduct of foreign policy is concerned. If you don't believe that, merely contemplate the number of treaties and agreements on which the United States has reneged over the years because the negotiators of one party or one position could not get their political opponents back home to agree. But the price, high as it is, seems to us indispensably worth paying. What does not seem reasonable is the way Messrs. Mondale and Hart are needlessly inflating that price every day.

—THE WASHINGTON POST.

Deregulating the Airwaves

As the presidential campaign hurtles on, a constructive proposal to open up political television is only plodding along in Congress. It is Senator Bob Packwood's Freedom of Expression bill and it deserves to go faster.

The bill, reducing government interference, needs fine-tuning. It could drive up the cost of campaign advertising unnecessarily, and it leaves open the possibility that big firms could buy up disproportionate amounts of advertising time to lobby unopposed for public support. But those are perfect details in an otherwise admirable proposal.

Public regulation of America's airwaves began 50 years ago because they belong to the public and there were not very many of them. That scarcity prompted Congress to say that radio and television stations must be licensed and must live up to federal standards of, among other things, "fairness" and equal time.

The fairness doctrine means that a station must devote reasonable time to important public issues and contrasting views. Equal time means that if one candidate obtains time, others running for the same office are entitled to the same. All that has meant government sticking a big nose into journalism and politics. Such intrusion offends Mr. Packwood, a Republican moderate from Oregon who heads the Senate Commerce Committee. He thinks that the intrusions are no longer necessary. For a variety of practical reasons, he is right.

The best protection for freedom of speech has always been more speech — diversity. When there is diversity, society can trust it to police fairness. Only when diversity did not exist in the case of scarce airwaves was it necessary to establish a traffic cop. But now electronic diversity is at hand. Cable television feeds dozens of additional channels into people's homes and is reaching more homes every day. Satellites and other new forms of transmission bring in additional voices.

Even the print media are becoming electron-

ic. The New York Times and others "broadcast" printing plates to satellite plants. Other publications are experimenting with videotext, written news transmitted to subscribers' home screens. The U.S. Constitution protects the print media from government interference. But now, a little bit electronic themselves, they fear infection. Some people would rather use that fact to justify new government regulation of the press than to give up old government regulation of broadcasting. The Packwood bill addresses all this technological change of circumstance. It would repeal the fairness doctrine, the equal time provision and other rules. Deciding what is fair on the air would be left to the people who run the stations. That is the right approach: in diversity we trust.

Two troublesome facets remain. The cost of television ads is driving up the cost of campaigns. The Packwood bill could drive it higher by undoing a requirement that broadcasters sell campaign ads at their lowest rate. The remedy would be to preserve this requirement, which has nothing to do with content.

The other problem is unfamiliar: issues advertising sponsored by wealthy private interests. Consider a hypothetical case. Congress is about to vote on a windfall profits tax on oil. If stations were free to sell wall-to-wall advertising time to people of any viewpoint, they would be likely to hear from big oil companies determined to defeat the measure at all costs. The effects on Congress could be rapid, decisive — and different than if there were more opportunity for public reflection.

American society knows a lot about television's power to sell products, but we have much less experience with the selling of ideas and issues. Prudence indicates that inserting some protection against this possibility is the first thing to do with the Packwood bill. Good politics, journalism and law indicate that the next thing to do is to pass it.

—THE NEW YORK TIMES.

Other Opinion

France and the Lebanese

France has largely preserved its image in the region. The French contingent did not leave Beirut under duress or amid insults from the population. All the same, the experiment of the multinational force has ended in failure. Never before has Syria held so many cards. A unified, sovereign Lebanon is still unsighted. The West's image has not emerged intact, least of all that of the United States.

The damage will be hard to undo. Paris is left holding only one trump card, and with it comes a responsibility: France is at present the only Western country that maintains confidential relations with most of the actors in Lebanon's drama. For that it can thank those of its soldiers who accepted death so that Lebanese might kill each other a bit less.

—Le Monde (Paris).

Primaries Serve a Purpose

To judge by Gary Hart's scramble for Jewish votes, he now understands the importance of broadening his appeal; Walter Mondale realizes that he must be less bland, more pug-

nacious, but he still seems oblivious of the need to attract the support of "new Democrats." That may not, in the event, be necessary merely to win the nomination. But the real prize is the presidency. If the Democratic nominee is to take that, he will have to extend his reach into his current opponent's group of supporters, as well as into the Reverend Jesse Jackson's "rainbow coalition." The possibility that neither Mr. Hart nor Mr. Mondale can do so already has people speculating about the party turning, at its convention in July, to someone completely different.

That is unlikely. More probably, one of the two front-runners will see what has to be done and do it. If not, the Democrats will probably go down to defeat. Should that come about, the cry will no doubt go up that the Democrats did themselves in by going for each other so fiercely in the primaries. That would be the wrong lesson to draw. The primaries have shown that none of the candidates yet has the breadth of appeal to bind the party together and topple Mr. Reagan. Fortunately for them, the primaries delivered this message seven months before the election.

—The Economist (London).

FROM OUR APRIL 4 PAGES, 75 AND 50 YEARS AGO

1909: Pope Alters Conclave Rules

ROME — Pius X has introduced an important change in the method of electing his successors. The rule was as follows: When, after the balloting, it was found that no candidate had obtained the necessary two-thirds majority, cardinals were allowed to change their votes. Pius X has abolished this method of election. At the same time, however, he has taken measures to expedite the election. The cardinals have been allowed to hold only two ballots a day, one in the morning after Mass, the other in the evening. The new ruling provides for four ballots, two in the morning and two in the evening. Thus a papal election will take half the time occupied during the last seven centuries. It is said that this change arises out of an incident at the last conclave.

1934: Pravda on U.S.-Japan Strains

MOSCOW — A note sent by Koki Hirota, Japanese foreign minister, to Secretary of State Cordell Hull, requesting the cooperation of the United States in settling Far Eastern problems, is merely one phase of diplomatic preparation for further Japanese military seizures on the Asiatic continent, and "Hull's courteous reply is not worth more than the paper it is written on," declares an editorial contributor in the newspaper "Pravda." "Having sought for 40 years to strengthen its position in the Pacific," continues the contributor, "the United States will not relinquish its position there without a struggle, just because that is the frank desire of Tokyo. This diplomatic move by Japan does not by any means signify a weakening of the imperialist struggle."

Dr. IMF's Bitter Medicine Is Good for You

By Henry S. Bienen and Mark Gersovitz

PRINCETON, New Jersey — The austerity conditions that the International Monetary Fund imposes on a developing country before agreeing to loan it money are often described as "bitter medicine." True, the magnitude of the required adjustments is often considerable, and conditions dictated to particular countries can be questioned. However, governments do not come to the IMF unless their economies are in trouble, and the fund's requirements are often the best medicine around.

Certainly, economic programs imposed by the fund have occasionally had unfortunate political consequences. Devaluation triggered a military coup in Ghana in 1972, and since 1977 the lifting of food subsidies has led to riots in Peru, Sierra Leone, Egypt, Liberia and Sudan. But many countries operate year after year under IMF conditions without serious political instability.

Still others comply only partly with the fund's requirements, adjusting their policies to take account of domestic political repercussions.

Nor does failing to reach agreement with the fund guarantee political stability: Michael Manley, the former prime minister of Jamaica who broke off negotiations with the fund, found he could not revive the economy and lost the 1980 elections. What are the alternatives to an

IMF cure? One of the most common is the rationing of foreign exchange. This is meant to act as a tariff, helping the developing country to cut imports and replace them with goods produced at home. The problem is that such rationing usually gives a large bureaucracy discretion over coveted foreign currency, encouraging bribery and corruption among a few well-connected people.

Inefficient rationing means that firms cannot get imported parts, in-

transfer funds abroad or obtain trade credits. They may be reduced to cumbersome international barter. Others may find themselves unable to meet their bills with short-term borrowing and may have to depend on their own savings for capital accumulation.

Some countries with large debts may feel that such isolation is a bearable price to pay for keeping the resources that would be used to service their debts. But many nations may be divided about this: Some

Economic stabilization programs are hardly the only or even the most important cause of political instability in the developing world.

dustrial production is idled and people lose jobs. Often the only groups to benefit are government managers, public sector employees and capitalists producing for the home market.

The alternative for a strapped developing country is to refuse to service its international debt, raising the risk of eventual repudiation.

No country has chosen this path since the 1930s, but the possibility has ignited speculation about creditors' retaliatory weapons. Debtors may find that they can no longer

groups within the country will prefer reaching agreement with the IMF, while others will feel that they would benefit from repudiation. Clearly, this would increase the prospects of political instability.

But economic stabilization programs are hardly the only or even the most important cause of political instability in the developing world. Argentina's military regime was deposed for political not economic reasons: It had been discredited by the Falklands war and by popular anger

at its repressive policies. Meanwhile, Chile's military regime has maintained control and even rallied the middle classes despite the severe austerity measures it has imposed.

In the Philippines, the assassination of opposition leader Benigno Aquino has had far more destabilizing effects than President Ferdinand Marcos's support for economic policies designed to meet IMF conditions. And not even the repressive Marcos regime has been able fully to implement the fund's conditions. Repressing political opposition is not a necessary or sufficient condition for implementing coherent economic stabilization policies.

The relationship between political instability and the imposition of IMF conditions is at best a tenuous one. A regime's human rights record, the reach of its bureaucracy, the style and competence of its leaders and the strength of the economic groups it must control — all will affect its ability to implement stabilization programs. Automatically blaming the IMF for political instability in developing countries is merely blaming the messenger who carries the bad news.

Mr. Bienen is professor of politics and international affairs at Princeton University. Mr. Gersovitz is a research economist there. They contributed this comment to The New York Times.

Lebanon: Reagan Flip-Flops

By Tom Wicker

NEW YORK — Despite his efforts to conceal it in lofty diplomatic language, Ronald Reagan's flip-flop in Lebanon is visible to anyone who wants to look. But does anyone really want to look? Or will Mr. Reagan, with an engaging smile and an old soft-shoe, once again dance away from responsibility?

Only two months ago he requested the Speaker Tip O'Neill was "ready to surrender," by withdrawing the marines. Now Mr. Reagan has given the speaker and the president pro tem of the Senate formal notice that he has withdrawn the marines — a 180-degree reversal.

Last October, after 241 marines were killed in a truck bombing of their barracks, Mr. Reagan insisted that keeping the force in Lebanon was "central to our credibility on a global scale." Even before that he had discovered an American "duty to stop the cancerous spread of Soviet influence" in the Middle East and to save the region from being "incorporated into the Soviet bloc."

A month before the president's slur on Mr. O'Neill, a report from a Pentagon commission of inquiry warned him that his "expansion of our military involvement in Lebanon greatly increased the risk" to the small marine contingent. The report cited "an urgent need for reassessment of alternative means" to achieve U.S. goals in Lebanon.

Mr. Reagan did nothing. Then in March the Lebanese government quite predictably reached a state of near-total collapse and he was forced to move the marines from their exposed position on land to the safety of U.S. ships offshore. That, however, was not a withdrawal or a retreat; it was, as Mr. Reagan insisted, only a "redeployment."



"Would anyone whose credibility has not been trimmed please raise his hand?"

Here was another in a long string of contemporary political perversions of language to conceal or distort reality. The redeployment, moreover, was accompanied by much ringing rhetoric about how the marines might return.

But now the flip-flop is complete. Mr. Reagan has decided to "terminate the participation" of the marines in the multinational force that had been in Lebanon since 1982. The cost? The lives of 264 marines, combat wounds for 137 more and roughly \$60 million — not to mention an apparent decline of the Reagan administration's credibility throughout the Middle East.

For all of this Ronald Reagan has no one to blame but himself, despite George Shultz's forlorn attempts to throw the blame on Congress and on the War Powers Act. Whatever the deficiencies of these institutions, Congress in fact voted in October to give Mr. Reagan a free hand in Lebanon for 18 months; and although that resolution might have been reconsidered had he not acted first, it was his policy that failed, not the nerves of Congress.

First, Mr. Reagan sought what he

was repeatedly warned were unattainable goals. In a country that has known little peace for a decade, he thought the warring religious factions could be reconciled. In a divided country that has scarcely ever known stability, he tried to achieve it under a weak, American-supported Christian government. In a land where Syria has strong interests and historical claims, he worked to exclude Syria from a voice in Lebanon's future. And in a situation in which Soviet backing for Syria inevitably produced significant East-West ramifications, he thought a "peacekeeping force" of U.S. and NATO troops was appropriate.

Second, Mr. Reagan never adequately explained — not even to the satisfaction of that Pentagon commission — what he expected the marines to do, or how part of a "peacekeeping force" could properly support just one of the several contending factions.

Third, by his overblown rhetoric about U.S. "credibility" — which should never have been staked on a few hundred marines deployed with no clearly stated mission in a position untenable both militarily and

politically — Mr. Reagan laid a trap, then walked right into it. Circumstances that might easily have been foreseen, given Lebanon's troubled history, forced him to take the action he had termed surrender — the action he had declared would damage U.S. credibility.

But Mr. Reagan has demonstrated an unmatched ability to cloak his mistakes in John Wayne phrases like "stand tall" and "stay the course," and a long-frustrated nation has apparently been so hungry for the kind of tough-guy policy he has given it in the Caribbean, Central America and the Middle East that he may escape political responsibility for the fiasco in Lebanon.

Walter Mondale and Gary Hart seem too busy bushwhacking each other to make the case. The press and Congress seem generally convinced that the people don't want Mr. Reagan criticized too severely.

The facts remain: It was Ronald Reagan who sent the U.S. Marines to Lebanon and Ronald Reagan who kept them there at inordinate cost, long past whatever hope of success there might have been.

The New York Times.

Interest Rates: The Gloom Seems to Be in Order

By Hobart Rowen

WASHINGTON — The alarm bells are going off all through the White House as interest rates rise and give every sign of continuing upward. This is a reminder that the most sensitive nerve in the body is the pocketbook nerve, as Harry Truman used to say at the train station in that era when candidates traveled, sensibly, by rail. Many other things have changed since Truman's day, but not that basic truth.

Clearly, President Reagan's political managers fear that interest rates will continue to climb, shutting out potential home-buyers out of the mortgage market, depressing newly reboiling auto sales and, in general, aborting the recovery.

Lyn Nofziger, Mr. Reagan's jack-of-all-trades, says the \$20-billion deficits are "of no concern" so long as they don't affect inflation and interest rates. Mr. Reagan will be re-elected "if Republicans don't get overconfident and sit on their hands" and "as long as the economy continues to improve and we don't get into a silly little war somewhere."

There may be other factors that Mr. Nofziger didn't mention. The question of moral insensitivity, illustrated by presidential counselor Ed Meese's troubles, could hurt Mr. Reagan if the wound is allowed to fester. But economic issues, and especially high interest rates, could be the swing factor in November.

At the depth of the recession in 1982 the Democrats were convinced that high unemployment and the general economic misery associated with high interest rates were prevailing would work to their benefit in 1984. Although the economy has bounced back faster than either the White House or the Democrats envisioned, the recovery is uneven.

Substantial unemployment remains in the old smokestack industries. A huge trade deficit hurts exports. And the budget deficit problem has worsened to the point where the thought of a \$300-billion deficit in the late 1980s is no longer a figment of someone's crazed imagination. It may well happen.

With it all, nonetheless, the perception has been that prosperity is returning, the economy is booming. At least, until now. The one thing that

can quickly stifle that sense of progress is higher interest rates.

Housing experts at a conference of the Mortgage Bankers Association last month predicted that fixed conventional mortgage rates, which were around 12.5 percent as recently as May 1982 and which have now risen to 13.5 percent, will soon pass the 14-percent mark, then hit 15 percent by the end of the year.

The recent surge of housing starts — an annual rate of 2.2 million in January — cannot be sustained if mortgage rates start a such new climb. Housing experts think that consumers close their pocketbooks at some point around 14 percent.

Other interest rates are also creeping up. The Treasury recently had to pay 12.07 percent for new four-year notes, or a full percentage point over the 11.05-percent yield on four-year

notes as recently as 60 days ago. The prime rate has been boosted to 11.5 percent, one point over a year ago.

In part, this reflects booming economic activity. In part it reflects concern in the financial market about the political unwillingness to deal with the deficit. And it reflects Federal Reserve Board actions, which now clearly are designed to promote a modest increase in interest rates.

The two most famous gloom-and-doom boys in Wall Street see a further upward trend in interest rates as inevitable. Henry Kaufman of Salomon Brothers predicts two separate 12-point increases in the Fed's discount rate. Albert Wajolower of First Boston Corporation predicts an imminent rise in interest rates until around election time. "After 1984, interest rates will rise more dramatically," pushing the 30-year Treasury

bond rate above the record 15.25 percent of 1980, Mr. Wajolower says.

Such predictions make investors uneasy and raise the blood pressure of Treasury officials who believe that Wall Street can create a case of self-fulfilling jitters. They also play for some kind of package deal to cut the budget deficit that might help calm financial markets. But don't bet on it.

The chairman of the Senate Budget Committee, Republican Pete Domenici of New Mexico, said candidly the other day that it is too late to do anything about the deficit this year, and probably next year as well.

So to the extent that President Reagan is looking for some way of holding back the interest-rate surge, he is not going to get help from the deficit-reduction side — this year or next. That makes Mr. Wajolower's grim interest-rate prediction for 1985 and beyond look pretty sound.

The Washington Post.

LETTERS TO THE EDITOR

ICSU and UNESCO

Regarding the report "U.S. Defenders of UNESCO: Scientists Say Agency's Role in Research Is 'Critical'" (March 27) by Walter Sullivan:

The International Council of Scientific Unions (ICSU) is not a UN agency, as the article asserts, but an independent international non-governmental organization created long before the UN system existed.

In its present form, ICSU — composed not only of national science academies, as the report states, but also of 30 international scientific unions and 17 interdisciplinary committees — was set up in 1931. It played an active role in putting the "S" in UNESCO when the latter was formed in 1946. Since then it has been an independent adviser to UNESCO's programs in the exact and natural sciences. Many of these are carried out in partnership. ICSU receives a yearly subvention from UNESCO that is used solely to support some of its scientific activities.

The financial resources of ICSU are very small; the official budget of the entire ICSU family is only 10

percent of that of UNESCO's science program. But, to be complete, a catalog of ICSU financial assets should include the value of the contributions made in kind by the thousands of scientists and hundreds of laboratories and institutions that participate voluntarily in ICSU programs. Calculated in this way, ICSU's resources would be impressive indeed.

Equally impressive would be its achievements in organizing major international scientific projects such as the International Geophysical Year and the International Biological Program, carried out with low administrative budgets, with a small but efficient staff and with the active cooperation or large numbers of scientists throughout the world.

The total number of salaried staff servicing all ICSU bodies is only about 30 persons. Of course, much voluntary effort is contributed by scientists and institutions throughout the world cooperating in UNESCO programs; indeed, UNESCO and ICSU play a complementary role. UNESCO activities being mainly based on its large staff and that of ICSU predominantly on voluntary

effort, the two together cooperating in worldwide joint programs.

Although I question the degree of influence that you attribute to the United States in UNESCO during the past years, I would like to stress that the United States has always played an active role, together with its colleagues, in charting ICSU's course. An American has at all times served either as an officer or as a member of the executive board.

SIR JOHN KENDREW,
President, ICSU,
St. John's College,
Oxford, England.

Walter Sullivan's report poses a problem and then refutes, by quoting Dr. Walter A. Rosenbluth, a possible solution: that of building up the International Council of Scientific Unions to enable it to promote international cooperation in sciences.

ICSU may lack money, but its scientific authority cannot be disputed. ICSU and its member unions are generally too busy with science to devote time to their public image.

FRANCES DELANY,
Paris.

Arafat and Jesus

In response to the column "The Remarkable Resilience of Chairman Arafat" (March 9) by Flora Lewis:

In the past 2,000 years there have been numerous images of Jesus of Nazareth, but Yasser Arafat's Jesus Christ Superfidey is among the more bizarre. This is not the first time he has represented himself in the role of Jesus, and the modern Arab Palestinians as descendants of the Jews of Judea opposing imperial Rome.

At a UN conference on Palestine held in Geneva, I heard Mr. Arafat tell journalists the same fable last Sept. 2. He concluded, with a winning smile, "Jesus Christ was the first Palestinian fedayin who carried his sword along the road on which today the Palestinians carry their cross."

Ten years ago Mr. Arafat's public relations advisers were less refined, and Geneva authorities banned admission into the canon and display of Fatah posters representing Jesus nailed to a Star of David, with the caption, "Palestine."

D.G. LITTMAN,
Gland, Switzerland.

INTERNATIONAL HERALD TRIBUNE

JOHN HAY WHITNEY, Chairman 1958-1982

KATHARINE GRAHAM, WILLIAM S. PALEY, ARTHUR OCHS SULZBERGER
Co-Chairmen

LEE W. HUBNER, Publisher

PHILIP M. FOISIE
Executive Editor
WALTER WELLS
Editor
ROBERT K. MCCABE
Deputy Editor
SAMUEL ABT
Associate Editor
CARL GEWIRTZ

RENE BONDY
FRANCOIS DESMAISONS
RICHARD H. MORGAN
STEPHAN W. CONAWAY

Deputy Publisher
Director of Circulation
Director of Advertising
Director of Operations

International Herald Tribune, 181 Avenue Charles-de-Gaulle, 92300 Neuilly-sur-Seine, France. Telephone: 747-1265. Telex: 612718 (Herald), Cables Herald Paris.

Directeur de la publication: Walter N. Thayer

Gen. Mgr. Ass: Alain Lecour, 24-34 Hennessy Rd., Hong Kong, Tel. 5-35818, Telex 61170.
Managing Dir. U.K.: Robin Mackenzie, 63 Long Ave., London WC2, Tel. 836-4802, Telex 362009.
S.A. de capital de 1,200,000 F. R.C. Nantua, R. 712021128. Comptes Parisis No. 3427.
U.S. subscription: \$380 yearly. Second-class postage paid at Long Island City, N.Y. 11101.
© 1984, International Herald Tribune. All rights reserved.

الحرمان الأول

INSIGHTS

Missiles, Religion Begin to Stir Czechs

By James M. Markham

New York Times Service

PRAGUE—There is a wall in the heart of Prague, not far from the Vltava River, where intrepid spirits once scrawled graffiti against the Soviet-led invasion that 16 years ago crushed a spring of hope in Czechoslovakia.

These days another victim is memorialized on the low wall. His name is routinely painted out by disapproving authorities, but then defiantly daubed again: John Lennon.

It is not clear whether the slain rock star is intended as a metaphor for the stillborn Prague spring of 1968, when hopes briefly blossomed for what was called "communism with a human face." But this spring the name of the dead singer seems an apt emblem of a popular retreat into despair under what many diplomats regard as one of Eastern Europe's most servile and least imaginative Communist regimes.

The city of Prague, a Gothic and Baroque masterpiece unscarred by this century's wars, is so beautiful that on sunny days it seems to triumph over mere politics. Amid a fairytale of peaked, gold-knobbed church spires and twisting, cobbled streets, one of the communist world's best-dressed and best-fed populations goes about its daily rites.

The food shops and department stores are well stocked with goods from the Soviet bloc. A shipment of bananas, just in from Nicaragua, disappeared from the official shelves to be retailed on a thriving under-the-counter market.

Travel bureaus promote a glistening summer along Yugoslavia's coast. A special passport is needed for Yugoslavia, though, since lately a number of citizens have been slipping from vacations on the Adriatic to the West.

Since being imposed by the Soviet Union in 1969 in the name of "normalization," the leaders who still preside over Czechoslovakia seem to have struck a rough bargain with their 15 million compatriots. The politically silent majority is permitted an easy life, perhaps the highest living standard in Eastern Europe and certainly a work ethic that is one of the region's least exacting; a tiny population of dissidents is systematically hounded, bugged, interrogated and, when all else fails, jailed.

Western diplomats posted to Prague are charmed by the good opera and occasionally imaginative theater but numbed by the cautious pace. Nothing much happens in Czechoslovakia, and political life consists of a seemingly deliberate stalemate between pragmatists clustered around Prime Minister Lubomir Strougal and hard-liners sheltered by Gustav Husak, the 71-year-old president and Communist Party leader.

Last autumn, however, things stirred. Following the Soviet line, the state-run Czechoslovak press had predicted apocalypse if U.S. medium-range missiles were deployed in Western Europe. Then, without shifting gears, the state announced on Oct. 24 that Soviet "operational tactical missile complexes" were being prepared in Czechoslovakia and East Germany.

Shocked, Czechoslovaks reacted. Petitions protesting the Soviet deployment circulated in Brno and Prague, and Rude Pravo, the Communist Party daily, said it received "stacks of letters" from readers concerned that new missiles would bring war down on their heads. Roman Catholic bishops in Slovakia issued an epistle condemning the making, deployment or use of nuclear weapons as "a crime against humanity."

"Naturally there was a surprise," said Vladimir Gorlock, a senior editor at Rude Pravo, chatting in an office adorned with a marble bust of Karl Marx. "It would have been astonishing if there had been no reaction. The



Old Prague.

letters were from people who showed that they had no idea of modern war."

Mr. Gorlock said older Soviet tactical missiles had been deployed in Czechoslovakia for some time. The new missiles, which Western experts believe to be longer-range SS-20s, will take a while to be deployed, he said.

The government faces another source of disaffection. Its embodiment is an 84-year-old Roman Catholic prelate who lives in a palace next to Mr. Husak's on a steep hill overlooking Prague.

"The young people are awakening to religion," the prelate, Cardinal Frantisek Tomasek, said in a rare interview. "For us, this is a great hope for the future."

Long known for repressing the Catholic Church, the Husak government has lately taken a subtler approach, engaging in a discussion with the Vatican, apparently in the hope of preventing Pope John Paul II from stirring up more trouble here. Two years ago, a papal ban on priests' engaging in political activity threw a pro-government organization, Pacem in Terris (Peace on Earth), into disarray. Many priests have left the organization.

In December, Foreign Minister Bohuslav Choupek met with the pope in Rome, and last month Archbishop Luigi Pogg, the Vatican's East European trouble-shooter, came to Czechoslovakia. In two months, Vladimir Janku, the director of the secretariat for church affairs, is expected in Rome.

At the center of the frosty discussions,

according to Czechoslovak sources, is the Vatican's wish to find incumbents for 10 of 13 dioceses that do not have resident bishops. But the government insists on politically acceptable candidates and is also demanding the removal of a handful of clandestine bishops active in Czechoslovakia's lively underground church. The Vatican, in turn, wants Pacem in Terris formally abolished.

Another succession, the one in Moscow from Yuri V. Andropov to Konstantin U. Chernenko, produced a sigh of relief among Czechoslovakia's cautious leadership, according to Western diplomats. They said intimations of an innovative Andropov era were unconvincing to a regime that has actually banned the word "reform" from the official lexicon. The stolid opening moves of the Chernenko era look less unsettling.

After two years of stagnation, the Czechoslovak economy has started to grow. National income rose by 2.2 percent last year.

But the reality of economic life is simply to live off a solid, aging industrial base that is the economic heartland of the Austro-Hungarian Empire. Czechoslovakia seems to be coasting, with no assurance of a better or freer life for its people in the long term.

"We know that some people here would like the situation to be like Poland," Frantisek Kouril, the government spokesman, said, wincing at the image of chaos that the word "Poland" evoked. "But the majority of the population appreciates that they are living in prosperity and order."

U.S. Children Are Learning to Read By Getting It Down in Writing First

By Bernard Asbell

New York Times Service

NEW YORK—A new system in American schools is teaching children how to write before they read. And, with the aid of computers, it is resulting in a startling increase in youthful literacy.

As any author knows, you cannot write when somebody is standing over you, watching, waiting for the next word. But I stood there and watched. This young author, totally absorbed, wrote and wrote and wrote.

Christal Graves is just 6 years old, scarcely seven weeks out of kindergarten. That is too young, if you go by standard school practice, for most children to read "Dick and Jane," let alone write anything. For a class dress-up party, someone had come as Count Dracula, apparently stirring Christal's imagination. Here is what I watched her write (with some correction for spelling and punctuation):

Once there was a field. It was a haunted field. It was a ghost in the field. He pulled his skin off.

A man was going to buy someone. But he was not dead. So he pulled him down and shot him in his brain. And he took his heart. And he killed his self. And it was a really mess.

Count came out of his grave. And laughed for joy. He said it was beautiful. Count said, "Spirit." And all of the spirits came up. Count said, "Fun, fun, fun, fun, fun, fun." When Count sat down, all the spirits went down. Then he said, "O.K., let me get down," and he said, "Make room for Count." And they did. He was so happy. He jumped for joy and jumped for joy. And he fell. And said, "Spirit, spirit," as he laughed. He shouted, "Jump for joy." And everybody was asleep.

"She's so quiet and keeps so to herself," Christal's teacher, Betty Coley, whispered to me. "She could have gone through here for the whole year and I'd never have a hint of the creativity that's boiling in her. And there are others like her, right in this room."

When I later told a friend of mine, a teacher, about Christal and her classmates, she said, "I'm surprised they can hold a pencil for more than a word or two much less write sentences."

On the morning I watched her, in fact, Christal wasn't writing with a pencil, although she can. She was composing on an electric typewriter. Furthermore, in kindergarten she had learned to build letters into words by working on a computer. She learned so well that Christal knows how to write down anything she can say. And so do most of her 75 or so classmates (their teachers estimate that, at most, about 10 might need a little prompting).

Specially selected verbal prodigies? Not at all. They have just graduated from the three regular kindergarten rooms of an ordinary public school of an ordinary Southern town, Burlington, North Carolina, where the average I.Q. of schoolchildren, tested from the third grade on, matches the national average.

Compared with some of her schoolmates, Christal started late.

Matthew Howe, less than a month beyond kindergarten, asked his teacher one morning when he needed inspiration, to draw him a line on a sheet of paper. She scrawled a wavy swirl and looped it, then strolled away. Matthew squinted at it for a moment, waiting for words to come, then composed, in pencil, what appears to be a poem:

"A cloud swerves and curves and flows. Clouds are so beautiful that I can bite my toes."

What is happening with these North Carolina children in Marvin B. Smith Elementary School is also happening in every other school in Burlington: in kindergartens of Raleigh, the state capital, and in the village of Brevard, tucked remotely in the foothills of the Blue Ridge Mountains as well as in several Florida schools. It is happening in big-city public schools in Houston, Washington and Boston, and in well-heeled New Canaan, Connecticut; Rochester, Minnesota, and Westchester County, New York — 105 schools in 17 school systems.

Unlike many educational demonstrations (in teaching circles, a demonstration is a large-scale replication designed to validate a small-scale experiment), which often are proclaimed successes based on testing only a few hundred or even a few dozen children, this one involves 10,000 5-year-olds and 6-year-olds, white and black, Hispanic and Asian and Indian, of every income level. The two-year demonstration will be completed this June.

"I see a tremendous potential here," says Floretta D. McKenzie, Washington's superintendent of schools, "that can revolutionize primary instruction. It was easy for us to agree to participate, because it is revolutionary. You say you're going to let a machine instruct, and that it will succeed where some of us have not, that's hard for us educators to accept."

The project is the brainchild of Dr. John H. Martin, former school superintendent of Mount Vernon, New York, and a lifelong student of how children begin learning to read and write. He calls his method Writing to Read.

Learning to write as preparation for learning to read, as a matter of fact, is not a radical idea at all. For example, at the turn of the century, Maria Montessori found, in teaching and observing orphans and in Rome, that they naturally inclined to write first, and then to read. Sylvia Ashton-Warner, a New Zealander (and author of "Teacher," a best-seller some years ago), brought literacy to the Maori by teaching small children first to write the words and stories that each spontaneously spoke. And the same principle is used selectively in Europe today.

What is significant about Dr. Martin's method is not the computer, not the typewriter, not even the earlier-than-usual start at the age of 5. It is a system of teaching a child how to convert the sounds he already speaks into "sounds" he can write, or as Dr. Martin puts it, "having children understand that they can talk with their fingers on paper."

The system aims at allowing the child to write at the upper levels of his ability to think and talk. Having mastered the encoding of written language, logically the child should also be able to read at the upper levels of his individual ability to recognize and understand words. Writing to Read is the first effort in the United States at programming this old idea in meticulous detail, offering it to a broad range of children and carefully testing its results.

A full-scale evaluation by the Educational Testing Service of Princeton, New Jersey, will be issued after the current school year. But last June, many of the participating school districts released their own one-year measurements, based chiefly on giving kindergartners and some first-graders a standard first-grade California Achievement Test.

With striking consistency, both geographically and demographically, the children as a group scored higher in reading skills than 890 percent of their peers. Upon completing kindergarten, 63 percent of them were composing on paper full, original sentences and stories. Kindergartners are "officially" not expected to write at all. When the writing first-graders are divided to

separate black children from white, an unprecedented finding shows up. Of white children, 95 percent had learned to write as well as read, of blacks, 90 percent. Both figures are impressive for first grade. But when children of low-income families (those receiving free lunches) are separated out, both groups, black and white, according to the preliminary figures released by schools participating in Writing to Read, come out the same, slightly more than 96 percent able to write sentences as well as read them.

Just outside Stuart, Florida, at Palm City Elementary School, I visit a class of 5-year-olds on their first day of Writing to Read. It is an ordinary kindergarten room, colored cut-outs and drawings on the walls like any other, except that at one side sit four off-white, table-top computers; along other walls, a row of cassette players and electric typewriters.

I sit beside Ashley, who has long brown hair and a blue polka-dot blouse, and Josh, in a brown knit shirt. Like them, I slip earphones on my head. Each reaches to touch the computer's space bar. Josh gets to it first. On the screen materializes a multicolor drawing of a cat.

"This is a cat," says a soft, matter-of-fact female voice in my earphones. "Say the word cat."

Ashley and Josh sit shyly and silent.

As though knowing they would need a moment to recall yesterday's preparation session, the voice repeats, "Say the word cat."

This time both children recite out loud, "Cat."

From the upper left corner of the screen, the letter "c" flies to the center. The voice says, "Say cuh."

The children say, "Cuh." The command repeats. They repeat.

The letter "a" flies to the right of "c." The computer voice commands them to say the vowel, as in "cat." They say it.

From down below comes the letter "t." The children say, "tuh."

"C" flies back to center, and the voice says, "Say cuh and clap your hands." They do.

Research about learning has consistently shown that children learn best when their bodies and senses get into the act.

"Say cuh and stamp your feet," the lady in the earphones says.

The computer plays a five-tone tune. The children stamp their feet.

"Now type cuh."

Both Ashley's index finger and Josh's are searching for the "c." The lady in the computer, not obeyed soon enough, says exactly as she said before, no impatience, no reprimand, "Now type cuh."

Josh wins the race. He types "c."

The command repeats. This time Ashley does it.

After they make all three letters reappear at the middle of the screen as the word cat, the letters fly home and the voice demands:

"Now type cat."

Josh does it first, "c" then "a," then "t." The letters fly to center, snapping to attention as a Josh-made word.

Then Ashley does it. Then both of them again.

"End of cat," announces the computer lady.

"All done."

Ashley and Josh move to another table where they open a workbook, pick up pencils shortened for small hands, and a tape recorder with earphones instructs them to write the letters "c," "a" and "t." This workbook becomes a self-kept ledger of success and progress.

Then Ashley and Josh go to the electric typewriter. Finding the letters and typing them is now a snap. Next, they go to a table laden with clay, to be rolled and shaped into "c," "a" and "t." Finally, to another table with cassette players, for hearing a story while following it in a book. No first-grade primers these, but children's classics, such as "Mike Mulligan's Steam Shovel" and "The Three Bears."

Most children master each day's computer lesson easily in 10 minutes; some take up to 15, which is all the time they are allowed on the computer. Thus, four personal-size computers can serve five classes of 24 each for their daily 45-minute session of Writing to Read. About one out of 10 children has trouble completing the lesson, perhaps requiring special coaching from the teacher. When not busy at Writing to Read, the children are in their regular rooms having a conventional kindergarten day.

After learning "cat" in 10 minutes on Monday, Ashley and Josh learn "dog" on Tuesday, "fish" on Wednesday. On Thursday, the computer checks out what they know, so they can advance to a second cycle of words. On Friday, they discover that the letters and sounds they have already learned can be shuffled around to form "fat," "fog" and "dish." By the third cycle, the computer lady challenges them to build these written sounds into their own words.

In their first week, the children have learned nine phonemes, or spoken sounds. The language has 42 phonemes in all that, when combined and

recombined, comprise good spoken English. The trouble is that those 42 phonemes are spelled more than 500 confusing, inexplicable ways.

A child learns to spell the shortest and most important word in the language: "I." But then he finds out he can also spell that sound "eye" or "aye" or "y" as in "my," or "ye" as in "bye," or "ie" as in "lie" or "ar" as in "That" or "igh" as in "thigh."

The child tries to make sense of it. But he cannot.

The typical child comes to kindergarten with a working vocabulary of 2,000 to 4,000 words. The school usually issues him a standard first-grade reading book that narrows his mind to about 400 words, and a spelling book that runs to even fewer words.

But Ashley and Josh, in three 15-minute sittings at a computer, have learned nine phonemes that can be reassembled into many of the 2,000 to 4,000 spoken words they already know. In a subsequent work cycle, they learn how to write the sounds that compose the words "three," "leg" and "rabbit," and later discover that, by reshuffling, they can now handle "grab," "bell" and "teeth."

Every cycle of words unfolds like the last, until the 10th cycle, when Ashley and Josh learn the words "uniform," "book" and "butter" — and can now, theoretically at least, write anything they can say.

But it is not just theoretical. In about the fifth cycle, at typewriter time, the teacher turns the children loose to shuffle phonemes into words that say anything they want to say. By the eighth cycle, they are composing complete, if brief, sentences.

Here is one of the first literary flights of Jennifer, in a Raleigh kindergarten.

Cat likes dog.

A thum is big.

A bell is big.

A umbrella is big.

I love you jason.

Her teacher did not correct Jennifer's spelling, for Jennifer's spelling is quite correct. She is writing phonemes, converting the sounds or words she knows how to speak into letters, according to a consistent system that makes sense. In fact, if there is anything not systematic in her writing, it is that Jennifer has already absorbed, just by seeing it somewhere, that "bell" and "umbrella" have a nonsensical extra "l," and spontaneously picked up the frivolous spelling of the serious word "love."

In a teacher's lounge at West School in New Canaan, the principal, Leonard Tomasello, said, "We had a kid a few weeks out of the program write, 'Snakes are dispikible.' If we said to that kid, 'You've got to spell correctly starting right now,' there'd be no chance in hell he'd pick up that word. He'd describe everything as 'nice' or 'bad.' The most overused word in young children's writing is 'nice.' And it doesn't describe anything."

"When we gathered parents to prepare them for this," says Cathy Wilcox, who has taught kindergarten in New Canaan for 13 years, "they raised nervous questions about 'wrong' spelling. Finally, I put it to them: 'Are you really concerned about temporary misspellings when we're opening up a new world to them? You couldn't write at all when you were their age. They're writing, and they're reading. We know from experience that they make an easy transition to proper spelling when the time comes.'"

Education professionals, on first hearing of Writing to Read, almost always recoil at the thought of permitting children to spell incorrectly without immediate correction. Usually, but not always, they withdraw their objections upon hearing that within two years tests show these children to be much better spellers than most.

The most persistent skepticism that Writing to Read must face among established experts in reading and early learning is on the question of the proper age for a child to start. A leading voice against rushing the onset of formal instruction has been that of Dr. Louise Bates Ames, a child-development specialist at the Gesell Institute of Human Development in New Haven. In commenting on Writing to Read, she defers to the judgment of another "expert" — the child.

"Children protect themselves pretty well," she said. "If they're not ready for a computer or a typewriter, they just won't do it with any real attention. If they're showing enthusiasm, then it's O.K. with me. If these test results hold up into the third, fourth and fifth grades, then I'd be willing to say it's a good thing."

The practice of starting children to read at 6 appears to be simply a matter of routine. "If you ask teachers to tell you why," said Dr. Martin, "you get statistical generalizations that are shallowly based on faulty research." He cited some studies from the 1930s, indicating that children below the age of 6½ did not learn as well as those over that age. "They didn't," by the reading methods... used, which we now reject."

Cleaning Up After the Ukraine Disaster

By Dusko Doder

Washington Post Service

MOSCOW — Spring has not yet arrived in the European part of the Soviet Union and Viktor Kostin is not quite sure whether this is good news or bad.

Every morning the department Mr. Kostin heads in the Ministry of Land Reclamation and Water Resources anxiously studies the latest field reports and weather forecasts, trying to project the scope of the spring flooding that will determine to a large degree how — and at what cost — the government is to deal with the consequences of the largest known ecological disaster in Soviet history.

Just over six months ago, on Sept. 15, more than a billion gallons of concentrated waste salts burst through a holding dam at a fertilizer plant near Lvov, in the Ukraine, and spilled into the Dniester River.

The thick brine traveled 300 miles (480 kilometers) down the river, "burning all living things in its path," according to a report last fall. It finally was stopped by a huge concrete dam that creates a 30-mile-long artificial lake, about 300 miles northwest of Odessa.

The dam saved the lower portion of the Dniester from disaster. But more than a million tons of salt settled at the bottom of the artificial lake, forming a deadly layer of salt water.

The Dniester was once among the cleanest waterways in the European part of the country. Now Mr. Kostin, 53, speaks of his department's efforts to restore its health in the abstract and circumspect manner of a doctor talking about a patient.

The question is what to do about the thick layer of salt that has formed about 35 to 45 feet (10.6 to 13.6 meters) below the surface.

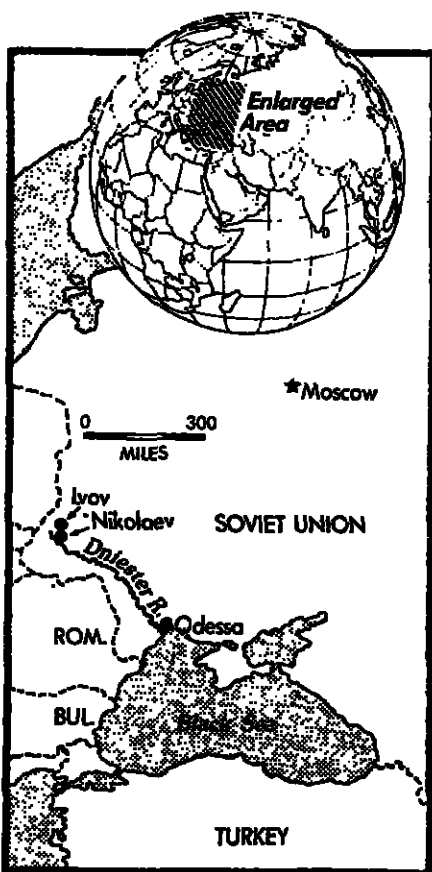
Everything appears to depend on the healing powers of the spring floods. Widespread, heavy flooding, an unlikely prospect at the moment, would raise the water level and currents in the artificial lake sharply, allowing experts to release water through the dam at levels of salt concentration safe for fish and humans.

That would be the cheapest cleaning operation and the one that Mr. Kostin and his aides are hoping for. But in case the flooding is not heavy enough, they are considering alternatives.

One would involve dropping huge tubes into the lake to suck up the salt from the bottom. Another plan calls for setting up specially designed machinery at the lake bottom to create controlled water currents. These currents would dilute the salt layer and allow the release of water through both the top and bottom of the dam at prescribed levels.

A combination of these methods may be used to cleanse the lake before the damage is irreversible.

The incident last September inflicted "huge damage" on the area, Mr. Kostin said in an interview. The spill disrupted water supplies to



The Washington Post

Sept. 15. Mr. Kostin said the impending catastrophe was discovered around noon, allowing for villagers to be evacuated and for road and rail traffic to be halted.

Authorities later had to shut off water to several cities and villages and also to scores of industrial enterprises in the area.

Mr. Kostin, who has worked in the resources

More than a billion gallons of concentrated waste salts burst through a holding dam and spilled into the Dniester River. The thick brine traveled 300 miles downriver, "burning all living things in its path."

department for more than 20 years, said there has never been an ecological disaster in the Soviet Union "so huge in its scope."

Soviet authorities normally do not publicize ecological disasters, at least not until long after they have taken place.

The size of the Lvov accident, however, demanded a public explanation. After the immediate problems posed by the spill were resolved, Nikolai Vasilyev, the minister of land reclamation and water resources, gave a detailed interview to Izvestia, the government newspaper.

"The dam broke," Mr. Vasilyev said in the Oct. 28 interview, "because of errors in design and construction, because of poor technical control and violations of rules governing the use of the waste pond." He said that federal inspectors had warned the fertilizer plant officials in 1982 and in May last year that the dam had to be improved.

Eight officials had been arrested, he said, because these warnings had been ignored.

The Ministry of Fish Industry subsequently reported that 920 tons of marketable fish and 1,300 tons of fingerlings perished in the Dniester because of the accident.

Mr. Kostin said things are now back to normal, except for the artificial lake at the Novodniestrovsk dam. "It was our fortune, one could say, that the dam was on the path" of the thick brine, thus helping to localize the accident and preventing the destruction of flora and fauna on the lower section of the Dniester.

Mr. Kostin suggested that fish and plant life in the stricken section of the Dniester would be restored gradually, and he expressed the hope that his department would be able to clear up the Novodniestrovsk lake by year's end.

"Naturally, such accidents are rare," he said. "One cannot forecast everything in advance. It's hard to know in advance what's going to happen, but now we have learned a few things."



Children work with computers in a California school.

OFFICE AUTOMATION

A SPECIAL REPORT

WEDNESDAY, APRIL 4, 1984

Page 9

Planning Is Key
To Profitability
Of New Systems

By Walter Ulrich

HOUSTON — Office automation is the most important change to occur in the office since the office was wired for electricity early this century. Today, the office is being wired for information. Automation increases the productivity of the office, saving money and improving the quality of decision-making. Better decisions quickly translate into more revenue, better margins and increased earnings per share.

Office automation is the application of computer and communication technology to the office or "knowledge" worker. It is not a single technology; instead, it is an integrated collection of tools that speed the collection, analysis and dissemination of information. It includes many technologies: word processing, electronic filing, electronic mail, personal computing, information access, executive workstations. Computer power extends and enhances analysis, and communications speeds the retrieval and exchange of information.

Most traditional offices today are the same as offices were 50 years ago. Before we can appreciate the office of tomorrow we must examine the office of yesterday. The typewriter is already an anachronism. Changes to a typed document usually require that the document be retyped by the secretary and re-proofread by the document's author.

Paper filing is a mess almost everywhere. Physical filing is one-dimensional. The human mind is multi-dimensional, and the way people recall information often fails to match the way it was filed. Budgeting and planning is a painful and time-consuming process using pen and calculator.

Traditional communication methods are slow and expensive. Less than one-third of all telephone calls reach the intended party on the first try. Postal authorities are noted neither for speed nor perfect reliability. The cost of a telex is high in today's technological age, and telexes suffer from the bottlenecks and errors of traditional telex centers and mailrooms.

In the traditional office, activities are neither automated nor integrated. The central computer is completely separate. How many times have you seen a secretary typing something from a computer printout?

In the modern office, word processing helps secretaries to work faster and easier. Minor revisions can be made in seconds instead of minutes, and major revisions can be made in minutes rather than hours. The author proofreads only the changes. The document is completed quickly and can sometimes be sent to its recipient electronically, in seconds.

Documents are filed electronically. Documents can be searched by author, recipient, date, subject, index, and by "key" words in the content. Documents can be reviewed on a cathode ray tube (CRT) screen or printed out.

Personal computing puts a powerful analytical engine on the professional's desk. Budgets can be changed and results automatically recomputed. Trends can be displayed graphically and sensitivity analyses can be performed. Budgeting and planning can be done quickly and accurately.

Electronic mail speeds communication between business professionals. A businessman prepares a text message at a keyboard. The message is stored in an electronic "mailbox" where it is immediately available for its recipients. The computer acts as an electronic post office where messages are conveniently prepared, edited, filed, addressed and replied to.

Voice mail systems can be used to turn a telephone into a powerful messaging system. Electronic voice messages are left in the sender's natural voice. The tones generated by pushing the keys (or by using an inexpensive tone generator) tell the system what to do. A message can be edited, saved, deleted, or sent to its recipient(s). When listening to a message, users can speed up or slow down playback, skip ahead or skip back, or replay the message from the beginning.

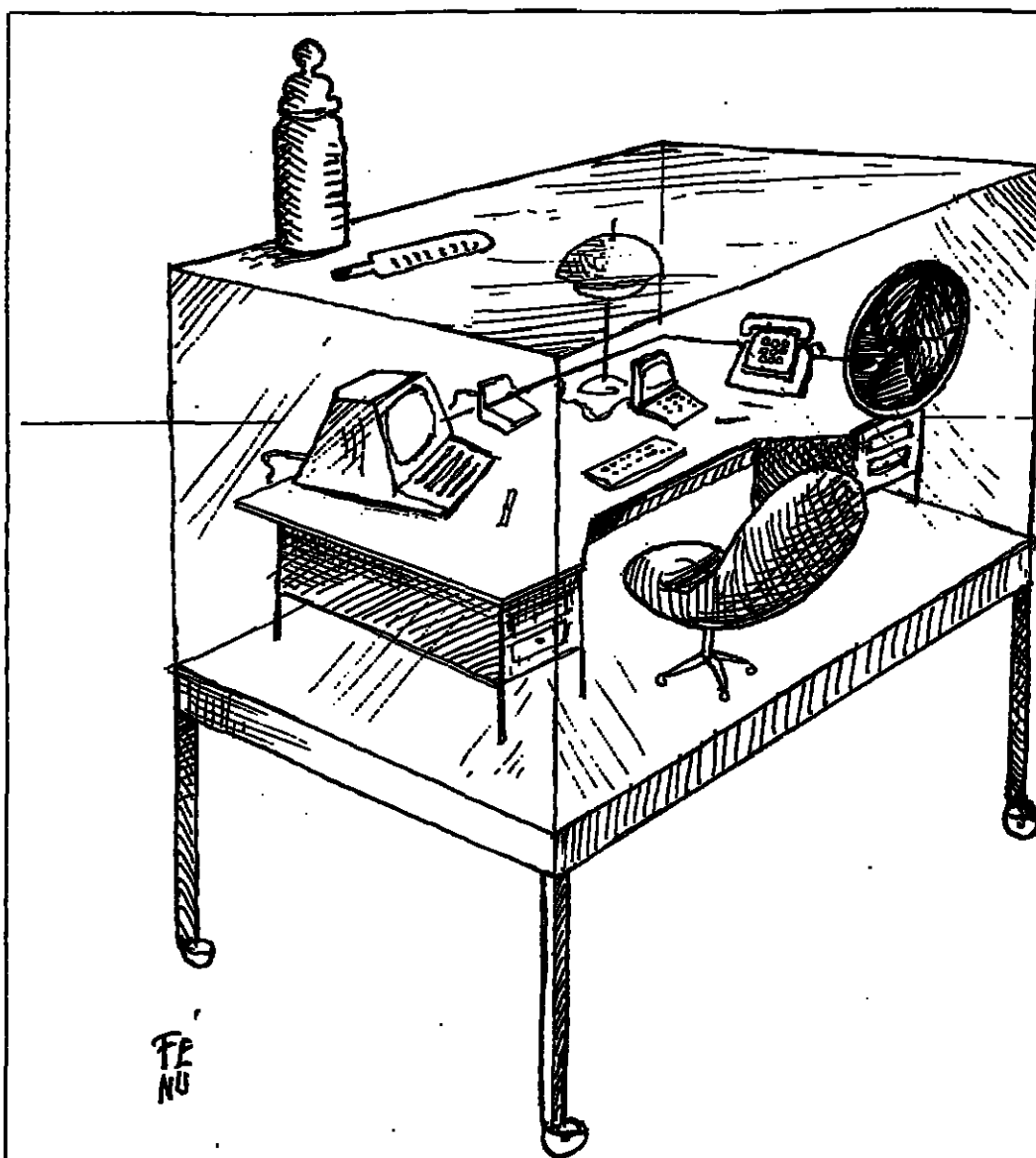
Electronic mail (EM) allows people to prepare and send messages at their convenience at electronic speeds. EM can be used at the office, from home, and while traveling. EM is surprisingly inexpensive and reduces information flow, cutting days and even weeks from information exchange.

Unlike the traditional office where people are the link between systems, in the modern office telecommunications technologies tie everything together. The communication infrastructure must be well designed or roadblocks and incompatibilities will reduce effectiveness. The "professional work station" is a powerful personal computer. It also provides direct access to both public and private data bases. A telephone handset is included for accessing text and voice electronic mail. Even the telephone switch (the PABX) is an integral element of the office of the future.

Word processing may cost \$8,000 to \$12,000 a work station. However, properly selected and implemented, each dollar in word-

(Continued on Next Page)

Walter Ulrich is president of Walter E. Ulrich Consulting, a Houston-based management and technology consulting firm.



Are They Really Frills?

'A poorly planned environment can make a video display terminal difficult to use and impossible to be comfortable with. A well-planned environment, however, can encourage workers to accept office technology and to use it.'

By John R. Adams

ANN ARBOR, Michigan — Archimedes once boasted that with a big enough lever, he could "move the world." He neglected to add that he would need a fulcrum and a place to put it.

Virtually every major organization is making the same claim about a more recent tool: "Give us enough office automation and we can raise productivity to new heights." Like Archimedes, however, these organizations are not telling the whole story.

Office technology must be used — and used properly — if any increases in productivity or if any decreases in costs are to be realized. In some sense, the facility is the fulcrum on which the lever of office technology must rest, and this lever is growing in size and in frequency of use. A makeshift support for office technology — something many organizations seem to be surviving with today — will collapse. Without the proper fulcrum, both workers and management will be either physically unable or psychologically unwilling to use the leverage office technology can provide.

A poorly planned environment can make a video display terminal difficult to use and impossible to be comfortable with. A well-planned environment, however, can encourage workers to accept office technology and to use it. It can make the terminal as natural a part of the work process as a pencil or a ballpoint pen.

Some characteristics of a good environment are:

- **Appropriate work surfaces.** The VDT should be flanked by two work surfaces at 45-degree angles with a depth of 30 inches (77 centimeters). There should be an area of the equivalent of a 30-inch-by-60-inch (77 by 154 centimeters) desk to handle paper — an especially important point in managerial workstations. There also should be at least 20 inches (51 centimeters) in front of the screen for the keyboard or for more paper.

- **Easily adjustable seating.** When workers begin to spend more than 20 percent of their time in front of the VDT, a comfortable chair becomes crucial. Most chairs can adjust for height between 3.5 and 4 inches (8.9 to 10 centimeters) — enough to account for the heights of many workers. A range between 3 to 5 inches (7.6 to 12.8 centimeters) is best. The front edge should be a "waterfall" design to prevent cutting circulation to the legs. Lastly, the chair should be adjustable from a seated position.

- **VDTs should tilt and swivel independently.** The plane of a screen should always be perpendicular to the line of vision of a user — seated or standing.

- **Localized acoustical treatment.** As more printers move into offices and out of word-processing centers, special acoustical controls should muffle their noises. This means acoustical screens around the printer itself.

- **Illumination.** Three sources of light need to be controlled: A reduced level of illumination from overhead fixtures will reduce glare on the screen; natural light should be controlled with horizontal blinds; task lights should be controlled by the worker to give the necessary illumination to paper and hard copy. In general, the contrast between the screen and the environment should be at a ratio of no more than one to five.

- **Storage.** New kinds of storage are needed for the magnetic media, print-outs, supplies and accessories that follow from the VDT and the personal computer (PC). These materials should not be allowed to take up work surface area but must be kept within arm's reach — about 30 inches (77 centimeters).

- **Shared terminals.** Only the environment can provide for the effective use of one terminal by more than one person. In some situations, clusters of workstations will share one terminal, or one terminal may have to swivel between two users. Sharing a terminal makes the arrangement of work surfaces, the movement of the terminal and the lighting even more difficult and crucial.

- **Temperature.** Present terminals produce about 1.5 times as much heat as one person sitting at rest — each additional watt of office automation produces 3.5 British Thermal Units (BTUs). The cooling and ventilating system must be able to handle the increase.

- **Electricity and telecommunications.** The environment must be able to provide more electrical capacity, flexible distribution, dedicated circuits, and simply more room for cables and wires (sometimes almost three times as many as found now). In addition, a recent study of office workers cited tripping over exposed wires as the most common office accident. Thus, a dangerous environment not only leads itself to inefficiency but also to litigation as well.

- **Space.** Although office systems are projected to require 10 to 15 percent of the space in an office or workstation, seldom has more space been added for a terminal; it merely infringes on the space for manual processes. The crowding threatens to erase any gains in

efficiency through the terminal. Because office automation still overlaps with manual processes, an effective environment requires, at least temporarily, more space for workers to make the best use of their equipment.

Facilities, then, must be an integral part of the planning that goes into office automation — not simply an afterthought. The environment, of course, costs money. And providing an adequate environment is the most commonly ignored cost involved with the acquisition of office technology. But just as personnel training is essential to make the best use of automation, so, too, facilities are fundamental to any gains in productivity automation may be able to offer.

A case in point illustrates the folly of amassing more office technology. A large organization in the eastern United States planned to reach a ratio of staff to terminals of 1 to 1 in the near future. A new facility was just being completed. Because this new building had not taken into account the extra space, electrical, and heating and cooling requirements technology would bring, the building was obsolete before it was finished.

Several steps to bring facilities into line with office technology would avoid this kind of debacle (a real situation, by the way). Starting with the corporate plan for expanding office automation, an organization can project the implications on facilities, recognizing that the implications will come into play over a period of time, not all at once. Then it can alter office work standards, criteria and designs to bring them into line with the ways workers really use — and should use — office technology, making sure that facilities can adjust to the implementation of technological changes. Finally, the organization can incorporate permanently the planning for facilities into the planning for office automation.

Office automation is a volatile issue. In 1980, the average ratio of staff to terminals among the Fortune 500 was 10:1. Although the average now ranges from 5:1 to 7:1, some kinds of organizations have reached a ratio of 3:1. The effect of this rapid change on facilities is enormous. Ignoring that fact will assuredly wipe out most, if not all, of the advantages organizations hope to gain from this most promising new lever.

John R. Adams is the director of Facility Management Institute, a research, consulting, and teaching organization in Ann Arbor, Michigan.

Total Systems:
Experts Remember
Human Element

By Amiel Kornel

PARIS — Intrepid corporate planners attempting to steer a course to the fully integrated electronic office discover the way is fraught with a bewildering array of technical, productivity and cost issues.

They can now take heart. Management consultants and other experts are saying that the journey might not be worth the trouble.

"The advantages of integration are relatively limited," said Hanns Schwimann, Paris-based vice president at Booz Allen and Hamilton, an international management consultancy.

"Present networks resolve very few office-automation problems," said Jacques Masson, manager for special projects at Cap Sogeti, the French computer software and services giant.

Many computer manufacturers offer an assortment of products that they say will link office automation devices such as word processors, electronic typewriters, personal computers, photocopiers and telex machines into a single harmonious symphony of information transfer.

Office-automation conferences, corporate board meetings and trade journals in the last year have been rife with discussions of the relative merits of different networking solutions, usually called local area networks.

But many experts are increasingly coming to the conclusion that, given the current needs of most offices and the state of the art in office automation technology, integration may not be the productivity panacea that some had hoped for.

According to a Booz Allen and Hamilton study, only 30 percent of white-collar workers in the United States could benefit from some sort of office networking. Twenty percent require classical data-processing services and the remaining 50 percent could be best served by access to individual, unconnected office-automation devices, so-called stand-alone equipment.

Office-automation experts recently interviewed emphasized that there are numerous issues that a company should address before considering the integration of electronic office equipment.

Large-scale introduction of vast numbers of individual electronic devices is more important for a company's productivity, they say. "Many stand-alones are preferable to a few integrated [devices]," said Mr. Schwimann.

Booz Allen estimates that the proportion of stand-alone electronic equipment to white-collar workers in the United States is fast approaching parity.

Such a saturation of office-automation equipment is essential before attacking the problem of networking, said Mr. Schwimann. "You cannot talk about integration if you do not have a lot, several hundreds, of participants already."

According to a Xerox Corp. study, the companies that reap the greatest productivity benefits from automating are those that have already improved their overall business position as much as possible. Information technology equipment, whether networked or not, does not provide automatic solutions to productivity problems.

Functionality is the most important consideration when deciding which, if any, local network a company should install. The configuration and office applications offered by the network should respond to corporate requirements. "The user must first identify what he wants the thing to do," said John Godfrey, a consultant at Mackintosh International, a U.K.-based management consultancy.

And the existence of a large number of coworkers that need to exchange information is a prerequisite for integration. "It's no use having a telephone on your desk if

there's no one else in the world to talk to," said Tony Brewer, a consultant at Buller Cox and Partners in London.

Office automation experts do not seem impressed by the possibility of connecting personal computers to photocopiers to telephones to telex machines to pencil sharpeners, ad infinitum, via networks. "My secretary and I prefer to get up and go to the copier just to move around," said Mr. Schwimann.

And the necessity for mixing digitally coded voice, data and images in a single office network is still limited, they say. "Most of the companies are not yet there," Mr. Schwimann said. "The payoff is not evident."

Perhaps the most serious deficiency hindering the appeal of local area networks is the lack of a wide range of applications software, the programs that make all the machinery work and the information flow. Most of the systems currently available offer only messaging and document sharing.

"I don't really know of an office network that permits to bring something new to the user," said Mr. Masson. "It's as if you said I have a car, but no gasoline."

The dearth of useful applications has meant that most networking systems yield the same limited benefits.

"All these systems will do almost anything that any of the others will do," said Mr. Godfrey at Mackintosh. "For most users at the moment it is probably not that important which local area network they use."

The current lack of applications software is due in part to the variety and changeability of office tasks. The software engineer has a difficult time discerning each user's potential communication needs. "If local networks don't advance today," said Mr. Masson at Cap Sogeti, "it's because people don't know what to do with them."

Computer manufacturers have so far been offering only general-purpose software packages with their network systems. But companies are beginning to appear that plan to develop and market software products for specialized networking applications.

Consultants and manufacturers agree that office networks do not lend themselves to a cost-justification analysis. "My impression is that the price is disproportionate to the service offered," said Mr. Masson.

"It may never pay off," warned Mr. Schwimann.

Networking's more devoted followers argue that the advantages it can offer are significant, but less tangible than cost analyses. "There is a lot of consultant opinion that a strict cost justification isn't what you should be tackling this thing on," said Arthur Burns, a spokesman for Wang, the U.S. computer and office-equipment manufacturer.

With each manufacturer trying to assert its leadership in the networking marketplace, a multitude of approaches to office integration have been developed. The systems employ various transmission media, access methods, and data communication speeds. The information to be shared can be organized for transmission in several ways and the topology of the networks can vary.

Nevertheless, the broadest generic descriptions can be broken down into just a few categories. Currently, there are three basic configurations used to link the devices in a local area network: star, bus and ring.

In a star network, all devices are linked to a central point, usually a computer with memory storage that serves as a communications switch. The private branch exchange, or PBX, used commonly for a company's internal telephone

(Continued on Next Page)

Business Data Bases
As Planning Tools

By John L. Wolfe

WASHINGTON — For some corporations, office automation is limited to electronic equipment, such as desktop and miniframe computers and internal communications systems. But to most major companies explore applications for their electronic offices, international business and financial data bases are emerging as valuable information and planning tools.

Most computerized information systems are accessible via any microcomputer — which enables users to manipulate the information on desktop computers. Some services, especially those that provide direct market quotes, often require a dedicated terminal to access information. On-line services also are costly, since they often involve leased telephone lines connecting terminals to host computers.

"There are literally thousands and thousands of business data bases," said Jeffrey Silverstein, senior editor of IDP Report, a U.S. publication, which monitors international information services. Some data bases are truly international in scope, offering news and financial data from around the world. But most are intended to provide information to one particular industry.

Business information — specifically financial data — has taken the lion's share of the data-base market. "About 90 percent of the market is financial and business information," Mr. Silverstein said. U.S.-based services account for most of the market, according to Mr. Silverstein, who notes that the European market is just beginning to take shape.

Financial companies, such as banks, brokerage houses and insurance firms, tend to be the primary users of financial data bases. Marketing companies, import-export firms and other companies that need up-to-date monetary data "at their fingertips" are also heavy users. Indeed, all major financial institutions are hooked into at least one information system.

Not surprisingly, a host of data-base services have emerged during the last few years, all trying to stake a claim on the financial information market. Two of these — Reuters Monitor and Telerate — have successfully controlled the international market.

"Reuters has the corner on the market for international financial data-base services," according to Mr. Silverstein, referring to Monitor, the computer-based data service run by the London-based international news agency. Monitor has more than 15,000 subscribers worldwide. But about 32,500 terminals are in the field, since many clients have more than one terminal. Users pay a \$595 monthly subscription fee.

Monitor features data on commodities, bonds, money rates, market quotes, oil and shipping, as well as financial news and economic indicators. The service also includes a "contributed-data" segment, which is information provided by international financial traders.

Another feature, Reuter Monitor Dealing Service, allows dealers to enter transactions with each other directly through the system. The Monitor video screens have a unique "windowing" capability, which means that half of the screen can display monitor data while the other

(Continued on Next Page)

And Now, the Latest in Memos for People Who Hate Paper

By Alan Green

WASHINGTON — For a growing number of corporations, the hand-delivered memo is going the way of the mimeograph machine.

Instead, companies now are relying on electronic mail — the transmission and delivery of messages via computer networks or other automated systems — to speed their correspondence across the building or around the world. By switching to electronic mail, businesses have been able to simplify inter- and intra-office communications, cut down on "telephone tag" and, for multinational firms, eliminate problems caused by divisions headquartered in different time zones.

At Citibank, for example, a computer-based electronic mail system, accessible by telephone with any type of terminal or printer, permits more than 600 managers worldwide to send and retrieve documents at their convenience. At Ford Motor Co., everything from memos and letters to reports and schedules are transmitted globally among corporate personnel — in some cases at speeds of 2,400 words a minute. E.F. Hutton & Co., the New York-based securities firm, recently inaugurated a service that not only gives clients on-line access to research data, but also lets a customer send messages electronically directly to his or her broker. And even the White House, as part

of the Reagan administration's effort to reduce paperwork, is using an electronic mail system to speed documents between the Office of the President and U.S. government agencies.

Actually, electronic mail is not new. More than 1.7 million subscribers around the world now use Western Union's telex teleprinter network. Facsimile machines, which transmit single pages of text over telephone lines to compatible equipment, have long been popular with businesses. But the proliferation of the microcomputer has been the real boon to this medium.

"Electronic mail is for real," said Steven Weissman, editor of the

monthly newsletter EMMS, which covers the electronic mail industry. "The personal computer has made it that way. People used to say electronic mail was too expensive. Now they have a personal computer on their desk. It's simple. The means is there."

The potential for streamlining office communications makes the excitement about electronic mail understandable. At the least, an electronic mail network is a simple messaging system. Using a terminal, messages can be left on a computer-based "electronic bulletin board" that can be read by other users. A more sophisticated system will assign individual "electronic mailboxes" to users that typically

can be reached only with a special password. A system user can draft a document on his terminal, then send it by telephone to a computer for storage. At the same time, a note can be left in the recipient's "mailbox" that a message has been sent and is available for retrieval. The entire process takes just minutes, copies of the document can be sent simultaneously to other mailboxes on the network, and costs compare favorably with traditional delivery systems.

There are any number of ways to set up an electronic mail system, depending on an institution's needs. "If you're the smallest company in the world, and you need a convenient way to communicate

with people in the field, electronic mail will let you do that," said Mr. Weissman. "If the need is there, electronic mail can fill it, regardless of the size of the business."

For larger businesses like Citibank, the advantages multiply.

"There are benefits we have not even realized yet that are there," said Rich Coughenour, director of mail services and office automation for Citicorp. But, he added, the benefits realized thus far have been welcome, indeed.

Among those benefits, said Mr. Coughenour, who currently serves

(Continued on Page 12)

OFFICE AUTOMATION

Planning Is Key To Profitability

(Continued From Preceding Page)

processing equipment costs should displace at least \$2 of other direct costs. In some cases, direct benefits can reach \$4 for every \$1 spent.

A personal computer will cost anywhere from \$3,500 to \$7,000. Fortunately, the initial installation of personal computing can often be cost-justified by one spreadsheet application.

The cost of text electronic mail varies greatly depending on volume. For some companies, a brief domestic electronic message costs 5 cents and an international electronic message costs as little as 20 cents.

Voice mail systems typically require a capital investment of between \$100 and \$250 a telephone line. A voice mail system should be able to pay for itself, in hard dollars, in 12 months.

Routine tasks can be displaced and salary savings are possible. The real benefits of office automation, however, come from faster and more accurate information exchange and by better decision-making. The bottom-line benefit is competitiveness and profitability.

Mark Hayward, an office automation consultant with Walter E. Ulrich Consulting, said that implementing office automation is a complex and difficult undertaking. "There are great risks," he said. "Even a minor misstep can waste

money, create confusion, cause frustration and set back automation for years."

Assuming one company's selection will meet your company's needs is a common misconception. Hundreds of office-automation products are marketed. Many subtle differences exist between products. Products and services must be tailored to fit the specific organizational, cultural, business, and technical needs of a company. A product that would be ideal in one situation might be a complete disaster in another.

Office automation is a specialized field, and expert assistance is required. Companies should retain the services of reputable consulting firms to assist in the evaluation, selection and implementation of office systems.

The first step is to assess the organization's needs, bottlenecks, trends and requirements. The second step is to establish the criteria for meeting those requirements. Then, an overall office automation architecture is determined. Finally, vendors and products are evaluated and selected. Implementation and training are critical to ensure that the benefits are achieved.

The benefits of office automation are overwhelming. Elements of office automation are already visible in most organizations.



The CEMAP directory information system at work in the French Post Office.

BUSINESS INFORMATION SERVICES RANKED BY NUMBER OF CUSTOMERS

Parent Company	Service	Customers*
Quotron Systems, Inc.	Financial Information Services	60,736
Dialcom (ITT Corp.)	Dialcom	46,000
Equifax	Financial Control Services	30,000
Bunker Ramo Information Systems	Teletype, Aladdin Market Decision, System 7	28,000
Reuters Ltd.	Monitor	15,000
Telerate (Exco International)	Telerate	11,500
Dunsprint (Dun & Bradstreet)	Dunsprint	11,500
Commodity News Services (Knight-Ridder Newspapers)	Commodity News Services	9,500

* As of January 1, 1984.

Source: IDP Report, White Plains, New York.

The Standards Issue Slows Development

PARIS — Of course, many businesses' communications needs do not stop at the office door.

A company might require links to work-at-home employees, traveling salesmen, branch offices in other cities or businesses in foreign countries. It might want to transmit and receive a combination of voice, images and data.

Videotext systems, cable networks and satellites are being developed in many countries to facilitate these business communications.

But while transmission methods, media and systems now exist to link companies worldwide, regional and international telecommunications

have been considerably hampered by the plethora of protocols and lack of standardization that different manufacturers and governments have chosen to employ.

The signals from most local area networks, for instance, are encoded in such a way that they cannot be easily transferred from one type of network to another.

Industry observers are expecting IBM's recent announcement of the development of its own local area network to help impose a de facto standard on the market, as is often the case when the computer titan launches a new product.

Videotext systems, very popular among the European telecommunications monopolies, connect users' terminals or computers via the public telephone network. Several incompatible standards already exist, although moves have been made to harmonize them for the future.

Users can send electronic mail, consult specialized data bases, perform long-distance data processing and make financial transactions.

Some countries, such as France and West Germany, have launched optical-fiber cable projects that will permit broadband communications. Users could transmit high volumes of digitalized data along with sound and video signals. Business applications such as teleconferencing will be possible.

A new generation of telecommunications satellites are taking off into space to help businesses network internationally. Eutelsat, the European satellite organization, and France will each launch a telecommunications satellite later this year.

The Eutelsat ECS-2 and French Telecom-1 will offer a host of sophisticated business communications services.

— AMIEL KORNEL

Planners Remember Human Element

(Continued From Preceding Page)

switching is an example of such an approach.

Terminals on a bus network, first pioneered by Xerox with Digital Equipment Corp. and Intel, hook onto a cable that serves a single trunk to guide the communications between them.

In the ring approach, the transmission cable passes through each of the devices connected to the network, forming a circle.

Data can be transmitted over op-

tical-fiber cable, coaxial cable, or the twisted pair cables used in telephony. The network might employ the switching common to PBX's, baseband methods that divide data streams into timed pulses or broadband methods that divide the stream into different frequencies.

But those who are dazzled by the variety of competing technologies need only remember the advice of Mr. Godfrey: "I would recommend to anyone who is going to be a user that he knows what he needs before he even looks at the products."

Business Data Bases As Planning Tools

(Continued From Preceding Page)

half simultaneously communicates with another broker. The transaction component costs an additional \$1,250 monthly.

Reuters sees a lively international market for computerized business information systems. "The American and European markets draw on each other," said Dorothy Delman of Reuters, who adds that the international market will grow as more foreign firms become interested in U.S. financial data.

Monitor is certainly not without competition. Telerate Inc., a U.S.-based financial information company, has significantly stepped up its international marketing efforts. While the focus of Reuters is on worldwide information, Telerate leans heavily toward data from Western financial markets.

Telerate's financial information network offers market data and news covering U.S. and world money markets, foreign exchanges and Eurodeposits, securities and precious metals. In addition, the service offers information provided by third parties, including Quotron, Standard & Poor's and Dow Jones. Most Telerate data comes from a group of more than 250 banks, brokers and other financial institutions, which provide the service with continuously updated rates, prices and quotes. Telerate said that it receives as many as 500,000 updates in a single day.

Telerate subscribers pay \$540 a month for the basic service, which includes the cost of renting a dedicated terminal from Telerate. The company also offers optional services, which range from \$25 to \$500 extra a month.

Thus far, the bulk of Telerate's 11,500 subscribers are in the United States and Canada, although the firm has taken significant steps to attract international customers. Last year, Telerate, The Associated Press and Dow Jones & Co. jointly formed AP-Dow Jones/Telerate, which will market the financial-information network outside North America. Telerate holds 49.9 percent equity in the new company. Telerate's service is currently available in 24 countries, including France, Britain, Germany, Japan, Hong Kong and Italy. The company plans to expand to South Africa, Spain, Finland and Austria during 1984. The international market for business information is "vast, potentially far larger than that of the United States," according to the president of Telerate, Neil S. Hirsch.

Other popular financial data bases include Datastream, a British service that provides data on securities, market-performance indexes, exchange rates, commodities, financial futures and company accounts, dialogue and information retrieval services, which feature texts of articles from business publications and Dunsprint, owned by Dun and Bradstreet, which provides data on U.S. companies for international subscribers.

Merrill Lynch and IBM have announced a joint venture to provide stock quotes and financial data for IBM computer users — which could mean another major data-base provider. Service will begin in mid-1985. The Merrill Lynch/IBM venture will offer stiff competition to Quotron, the U.S. leader in electronic distribution of stock quotations. Merrill Lynch provides about 25 percent of Quotron's business.

There is also a plethora of "vertical market" data-base services vying for a share of the on-line market. These services are geared to specific fields, such as medicine, real estate, law and travel.

For example, Official Airline Guides has been providing an electronic version of its printed air-travel directory for nearly a year. Subscribers with microcomputers can dial OAG's Electronic Edition data base to access flight schedules and fare information. Data is updated daily. Subscribers pay a \$50 one-time fee, plus \$2.25 each time the service is used. In that same vein, TWA has developed Pars, an electronic information and reservation data base for travel agents and corporate clients. Pars includes data from all airlines, with schedules and fares for flights to nearly 100,000 cities worldwide.

For the legal profession, Lexis, owned by Mead Data Central, provides law reports, transcripts, data from American and European tax cases and updates on laws and statutes. Lexis is U.S.-based, with European information provided by Butterworths, the British legal publishers. Lawyers also can access Eurolex, a British data base with subscribers in the European countries, as well as Singapore, Hong Kong and New Zealand. Eurolex features Common Market law reports and texts from European cases. It also offers access to Interlex, an international tax planning service.

Meet the future Made in NEC.

At NEC, the computer and communications company, we're leaders in every field of digital electronics. We manufacture more than 15,000 products, covering the whole spectrum from semiconductors to super-computers. We're Japan's biggest name in digital telephone equipment and personal computers. The world's No. 1 producer of microprocessors. The No. 1 supplier of satellite earth stations and other microwave equipment. And the builders of the world's largest optical fiber communication network, in Argentina. With a reputation for reliability that's legendary — because it's true. And a corporate commitment to keeping sophistication simple for the end user that ensures outstanding cost performance across our entire product line.

Come and see what we're up to at Ce BIT-West Stand 1702/1802

Hannover Messe '84

INFORMATION MANAGEMENT SYSTEM
VOICE STORAGE SYSTEM
TELETYPE TERMINAL
ELECTRONIC KEY TELEPHONE SYSTEM
TELEPHONE SET
FACSIMILE
DISK DRIVE
PRINTER
PERSONAL COMPUTER
FIBER OPTIC LOCAL AREA NETWORK
DISPLAY MONITOR
VOICE INPUT/OUTPUT TERMINAL
MOBILE TELEPHONE SET
DATA MODEM
PROJECTION TV

NEC
NEC Corporation
Tokyo, Japan

هكزاس الاصل

OFFICE AUTOMATION

Easy-to-Use Equipment Means Top Sales

By Al Furst

BOSTON — Twenty-five years ago, office automation implied a room-sized computer in the basement — and not a whole lot more. But those days are gone.

In today's office, gadgetry reigns supreme as equipment manufacturers work hard to incorporate microelectronics — the same technology that paved the way for personal computers — into a myriad of office products including copiers, typewriters and dictation equipment.

"I don't know of one copier company for example, that isn't benefiting to one degree or another from microprocessor-based technology," said David Tarr, a senior analyst with the Yankee Group, a Boston-based consulting firm. "Copiers today are, as a result, more intelligent, easier to program and more flexible — in terms of their ability to do self-diagnostics, handle various sizes of paper, shrink and enlarge images and collate material."

"Our goal is full-scale personalization," said Hiroshi Tanaka, director of Canon Inc.'s reprographics division. Canon recently introduced a new line of tabletop copiers that feature cartridges of paper that office workers can easily insert themselves, thereby eliminating the need for regular service. Multiple-color capability is another

feature that Canon — and most of its competitors, from Xerox to IBM — also feature.

"In the field of full-color copying, our product-development goal is to produce an even higher-quality image through the incorporation of digital technology," Mr. Tanaka said.

In addition to digital technology, the copier community is experimenting with new reprographic mechanisms — including lasers. High-precision lasers are increasingly finding their way into new low-cost color printers, according to Kenneth Bosomworth, president of International Resource Development, a consulting firm in Norwalk, Connecticut. Most low-end computer printers are currently based on either ink-jet or thermal transfer technology.

Other unique hard-copy devices for personal computers come up in the office today. One, called the Palette, is an optical device from Polaroid that hooks up to a personal computer and automatically produces 35mm slides or instant prints of color graphics that are generated by the computer console.

Calculators, too, the forerunners of today's personal computers, are benefiting from microelectronic innovation. Most hand-held calculators, for example, in addition to specialized-function keys to calculate everything from profit margins to amortization schedules, also in-

corporate modest programming functions.

And as more and more programming languages are built into these machines, the boundary between calculators and hand-held computers will blur, said Marilyn LeMoine, a merchandising specialist for hand-held calculators at Hewlett-Packard's portable computer division in Corvallis, Oregon. Some calculators include a clock and stopwatch function as well.

Typewriters, too, are getting more sophisticated every day — largely due to the widespread use of memory chips, according to Lisa Pease, an office automation consultant at Venture Development Corp. in Wellesley, Massachusetts. The latest typewriter technology is characterized today by four major features: phrase memory, format memory, correction or line memory and a one-line display.

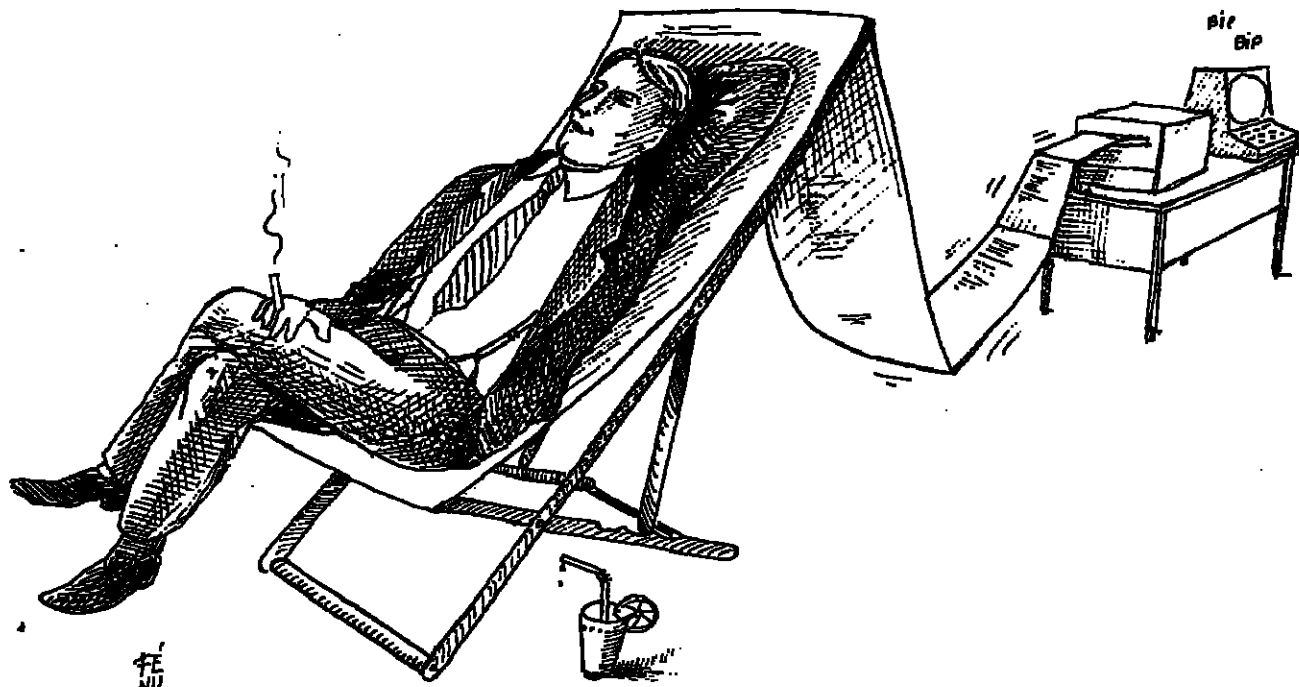
Phrase memory means that key phrases (like "Dear Sir," or "To Whom It May Concern," or "Very Truly Yours") can be called up at a single keystroke. Format memory offers a similar capability for frequently used page formats for business letters, envelopes or specialized forms. Another important memory feature — which is available even on low-end portable typewriters from Japanese companies like Brother — is a correction or line memory that allows the user

to call up the last line that was typed on a small screen for purposes of correction. The screen in most cases is either a one-line gas plasma or light-emitting-diode (LED) display.

These displays are close to finding widespread acceptance in the telecommunications sector. The result, Mrs. Pease said, is essentially a "jazzed-up telephone," which, in addition to standard functions like automatic last-number redial and conference calls, is capable of displaying names, titles and telephone numbers stored in the telephone's memory. A few years from now, she suggested, the next wave of display phones will appear — utilizing larger and more sophisticated cathode ray tube (CRT) displays. In addition to directory features, she said, these phones — mainly from private branch exchange (PBX) vendors like AT&T, Miltel, Northern Telecom and Rolm — will offer a limited data-processing capability.

These devices — really computerized phones — could "very shortly" subsume much of the market for dictation equipment, said George Colony, president of Forrester Research, a Cambridge, Massachusetts, market-research firm specializing in office automation. An office manager, for example, will soon be able to dictate a memo directly into a telephone. The information will then be stored in digitized form on a disk, which a secretary can type up into transcript and reinsert into the computer data base. Later on, if the manager wants to review the memo, he can do so by phone, even if he is out of town. He will simply dial his office, and a computerized voice will read him the memo. If he wants to make changes on the memo, he can do so easily. And by signaling his office with the appropriate telephone code, he can alert his secretary's workstation that a change has been made on the disk, so that the transcript of the memo can be altered accordingly.

Telephone-based voice-storage-and-forward systems are minimizing the need for dictation equipment, said John Murphy, an office-automation consultant with advanced office concepts in Bala Cynwyd, Pennsylvania. Instead of consulting a memo, busy executives can simply dictate messages, which are stored in digitized form and then routed to appropriate touch-tone telephone "mailboxes." If the recipient of the message is on the phone at the time, or out of the office, he can simply pick up his message later by dialing the office computer and punching in the appropriate access code.



'Telecommuting' Puts Office at Home

By Jonathan Miller

WASHINGTON — When Elizabeth Brodsky had a baby two years ago, she did not have to make a choice between quitting her job as a systems analyst with Riggs Bank and staying home with her daughter. She simply installed a computer terminal in a room of her suburban Washington house and became a work-at-home mother.

Mrs. Brodsky is one of an estimated 15,000 American "telecommuters" — workers who have substituted personal computers and telecommunications for the traditional daily trek to work. Apart from occasional meetings at the bank, Mrs. Brodsky does all of her work at home. "It's the greatest," said Mrs. Brodsky, who added that she continues to enjoy an "excellent" relationship with her employer.

While there are no official statistics on telecommuting, experts in the field believe that about 40 major corporations already have formal telecommuting programs and that the number will double this year. As many as 400 companies are experimenting with telecommuting on a small scale.

The new work method seems to benefit both employees and employers — employees because they can avoid often tiresome journeys to the office, and employers because many home workers seem to register significant gains in productivity.

"Telecommuting is moving beyond the buzzword stage," said Gil

Gordon, a consultant in Monmouth Junction, New Jersey, who specializes in studying telecommuting. Mr. Gordon said that firms are "getting into this for a real reason, to address a business problem." While not all workers can adapt to working unsupervised at home, others thrive on it, he said, adding that productivity can increase up to 50 percent in some circumstances.

In some ways working at home is hardly a new concept. Outside sales people have worked from home offices for years, and some industrial historians consider that the trend represents nothing less than a return to the cottage industries common before the Industrial Revolution. The key to the current vogue lies in the falling prices and increased availability of office-automation equipment.

Frank Knight heads an experimental telecommuting program at Nynex Corp., the company formerly owned by the American Telephone & Telegraph Co. that operates telephone companies in New York and New Jersey. He works at home with \$12,000 worth of electronic equipment, including a Wang Laboratories professional computer with a telephone modem and printer. He heads a group of 12 Nynex employees charged with developing a consultancy in telecommuting that will eventually assist other companies to implement effective telecommuting programs of their own. The benefit to Nynex is obvious: Telecommuting requires sophisticated home telecommuni-

cations and equipment that Nynex is well-equipped to provide.

Mr. Knight noted that, as the home becomes more like an office, the office comes to serve a new function, in some ways taking on some of the characteristics of a home. Because few telecommuters will work exclusively at home, they will continue to need a central location to meet colleagues and clients.

There is no established definition of a telecommuter. Jack Nilles, a senior research associate at the University of Southern California in Los Angeles, is widely credited with coining the word telecommuting. He said that his original concept grew from work he was doing a dozen years ago intended to provide solutions to urban congestion.

Because 40 percent of urban vehicle use is related to commuting, he said, telecommuting offers the possibility to significantly reduce traffic jams while eliminating the need for costly transportation systems.

Mr. Nilles called telecommuting a "subset" of "teleworking," which he said includes use of office automation and communication systems in traditional settings. He estimated that productivity gains realized from telecommuting can range from 20 percent up to 300 percent. Those who do "solitary work" — writing, numbers-crunching, thinking — are particularly suitable candidates for telecommuting programs, he said.

But only "a very small fraction" of the labor force will ever be full-

time telecommuters, because "people do enjoy social interchange in the office environment." He forecasts that telecommuting will grow at an annual rate of 300 percent this year with continued rapid increases until the mid-1990s, when growth will start to level off. By then, he said, about 20 percent of information workers (who comprise about half of the 105 million U.S. workers) will work at home at least part of the time, but not more than 6 percent will do so full time.

Telecommuting programs at most major companies are still in their infancy but managers who have been involved are almost all enthusiastic about their experiences thus far.

The social consequences of telecommuting are only starting to be understood. Art Buchwald, a columnist for the Los Angeles Times Syndicate, divides his time between a formal office in downtown Washington and a home office equipped with a CPT word processor. He has had the home processor almost five years, and he said that it has changed his working habits. Now he goes into the office in the morning, stays downtown for lunch, then goes home in the afternoon. He resumes work at home in the evenings.

Mr. Buchwald said that he loves his new routine, but that his wife is not so enthusiastic. "It is part of a trend, he observed. 'I know guys who work at home, and I'm amazed their marriages are still going.'"



Automation in a Paris insurance firm's headquarters.

John Caposon/Herald

Nixdorf eliminates the pain in the neck



Is your company paying the high price of reduced productivity because your computer systems don't fit the people who use them?

At Nixdorf, we go to great pains to eliminate the problems that can result from inflexible systems — problems like eye strain, neck strain, backaches and headaches.

In fact, the comfort of the people who will use our equipment is as important as any other consideration in the design process. Human

engineering isn't just a buzz word with us. It's a way of life. And when you look, the advantages are obvious. Since people can't change their height, Nixdorf makes workstations, desks and chairs that change theirs. To minimize eye strain, years of development went into the micro-mesh filter that cuts reflection and glare in our adjustable display screen.

We also developed flicker-free numbers and letters, displayed in an optimum size,

shape and color. And a movable, low-profile keyboard with rounded keys that help the human fingertip glide more quickly from A to Z and provide reassuring feedback to the user.

All of which means a more comfortable, confident and productive relationship between people and systems. So when you choose Nixdorf, you have a rare opportunity to make everyone happy. The people who buy the computer system and the people who use it.

Nixdorf Computer AG
Fürstenallee 7, D-4790 Paderborn
Telephone 5251/506130

NIXDORF
COMPUTER

NEC
NIXDORF

OFFICE AUTOMATION

The Importance of Oral Communication

Telephone Remains at the Heart of a Maze of Sophisticated Equipment

By Sarah Glazer

BOSTON — If you thought change would bypass at least one thing in your office — the old familiar telephone — think again.

Not only has technology taught the telephone some new tricks, but also, in many countries, deregulation of the telecommunications industry will increase options for telephone equipment and services even more.

Because of microprocessor technology, telephones are more portable; they have developed memories and, in some cases, they have been grafted onto computer terminals to let executives send mixed voice-and-text messages.

But the equipment that may have

changed most radically is the private switchboard.

At the heart of the new switches are computers, which automatically perform the duties of an army of telephone operators — although a few human operators are needed for even the most automated equipment.

Depending on the size of the switch, it is called either a key system, which normally handles from 5 to 50 lines, or a private branch exchange (PBX), which can handle as many as a thousand lines.

The most sophisticated models are evolving into far more than automated switchboards.

The latest PBXs can route both voice communication and data within a company and can provide

a host of advanced services, ranging from automatic dialing to sending voice or text messages around a department.

A feature available on some called voice messaging or voice store-and-forward, records messages from callers, much like an answering machine.

But it is also possible to route the message to others in the building or to originate a voice "memo" that is routed to a list of colleagues without the bother of typing and traditional distribution.

The worldwide market for PBXs will grow from \$4.3 billion in 1983 to \$6.6 billion in 1988, said H. Paris Burstin, a telecommunications analyst for the Boston-based research firm of Arthur D. Little, Inc.

He estimated that the United States will comprise the biggest market segment through 1988, with Europe in second place until 1986, when Asia will shoulder its way into second place.

A force Mr. Burstin identifies as a spur to sales and to competition among manufacturers is the worldwide trend toward government deregulation of the telecommunications industry.

In the United States, deregulation of AT&T, the U.S. telecommunications common carrier, spawned an outburst of market activity that surpassed most observers' predictions.

Recently, other countries have started the process of deregulating their post, telephone and telegraph

(PTT) ministries — a process which would end the total control that the PTTs now have over equipment a customer may attach to the public network.

British Telecom, the U.K. common carrier, will be deregulated at the end of 1984, and deregulation of Japan's common carrier, Nippon Telegraph and Telephone, is under debate in the Diet now.

Efforts to liberalize telecommunications are taking place in Canada and France as well.

However, customers in most countries still "have to buy equipment that is PTT-sanctioned," Mr. Burstin said.

"A vendor can't just enter the market but must meet qualifications of the PTT."

These rules force foreign manufacturers into joint ventures with local companies to sell their equipment in much of the world.

"We're not selling in Europe much," said Bill Kreppick, a marketing manager for Rolm Corp., a Santa Clara, California, maker of PBXs that experts consider among the most advanced.

He said that meeting PTT qualifications takes longer in Europe than elsewhere. "We've concentrated on areas where we could get started faster: the Midwest, South America, Japan, Hong Kong and Australia," he said.

Import and export barriers are not all political either.

Equipment from one country is not necessarily compatible with another country's public network.

Although networks are standardized all over Europe, they use different standards from those in the United States and Canada, said George Rackett, manager of marketing communication for the U.S. subsidiary of Siemens, the German telecommunications giant.

"You can't just bring a PBX from overseas and plug it in," he said.

Despite these problems, "deregulation is creating a very exciting race for market share among PBX manufacturers," said Amy Smith, a telecommunications analyst for the Yankee Group, a Boston-based market-research firm.

She rates the leading contenders as the U.S.-based companies AT&T and Rolm, Canada's Northern Telecom and Mitel, Japan's NEC, Germany's Siemens and Sweden's L.M. Ericsson.

Digital PBXs, which transform voice traffic into digital signals that can be routed through the same system as data, let a company use a single network for both data and voice without having to rewire a building. Digital PBXs are expensive, however. Ms. Smith estimated the starting cost to be about \$1,000 a line.

Features available on some PBXs go far beyond the capabilities of ordinary telephones. Several companies offer combination telephone/computer terminals that allow you to gain access to computer data bases through the same wires that connect the telephone. Northern Telecom has two models: one that works only with the PBX and a stand-alone version that an executive can hook up at home, said Brian Murphy, a company spokesman.

Putting a single telephone/terminal on every white-collar worker's desk is what Rolm's Mr. Kreppick sees as the ultimate goal of most equipment manufacturers. The office document of the future would have "text and graphics — maybe a bar chart or someone's signature — and a voice message or annotation," he speculated.



Hi-Tech's Answer to Files And Storage: Optical Disks

PARIS — The electronic clutter of the information age will soon be stored in high technology's latest answer to the filing cabinet — the optical disk.

The volume of information that people can collect, gain access to and exchange electronically will grow dramatically later this year with the commercialization of this laser-based storage medium. The optical disk will perhaps satisfy, at least temporarily, the computer users' voracious appetite for information storage space.

The disks, 8- to 14-inch platters that resemble hi-fi records, will have a storage capacity equivalent to as much as one million typewritten pages, or 50,000 still images. This is 4,000 times the capacity of the floppy diskettes used with many personal computers.

Several electronics manufacturers worldwide have delivered prototypes of the disks and the devices that store and access computer-coded information on them to customers. Large-scale production is to begin later this year.

But manufacturers and industry analysts doubt that in its current form the optical disk will find widespread use in the electronic office.

"The major areas of application in business and industry are probably not going to be in office automation," said Fred Heys, a consultant at Butler Cox and Partners, a management consultancy in London. "We believe the [office automation] market will be slow to develop," said Gordon Knight, a director of technology at Shugart, a wholly owned subsidiary of Xerox Corp., in Sunnyvale, California.

Shugart and Thomson-CSF, the French electronics manufacturer, co-developed the 12-inch, 1 billion-character optical disks that they each plan to begin commercializing in mid-1984.

Many manufacturers predict that the new technology will be ready for the office in four to five years, after further refinements in the devices as well as in the office environment itself.

"Office use will require a different packaging of the technology," said Gene DeKoster, vice president for planning and requirements at Storage Technology Corp. in Denver.

"Our company feels that there is a tremendous need in office automation... for the optical disk," said Tony Jasionowski, the director of recorder products at the Matsushita Technology Center in Secaucus, New Jersey. "The problem is that office automation... has not taken off as some people projected."

Some skeptics argue that using an optical disk in the office is like using a bulldozer for backyard gardening. They say that most offices do not yet need a device with such a massive storage capacity.

Manufacturers recognize that they might have to develop smaller optical disks with less memory if they are to penetrate the office automation market.

"For the office one can imagine less memory," said François Le Carvenec, manager of the optical disk department at Thomson-CSF in Paris.

"This is more memory than anyone is used to," acknowledged Mr. Jasionowski.

The optical disk "is a little ahead of its time," said Mr. DeKoster. He believes that the development of optical-fiber cable networks, with their ability to rapidly transmit high volumes of data and images, will eventually stimulate office use of the disks.

Unlike other electronic storage media, optical disks are not erasable. This so-called write-once characteristic, one of its greatest strengths vis-à-vis applications such as the archival storage of documents and pictures, is one of its greatest weaknesses in terms of the office, where there is an emphasis on creating and updating documents.

To store computer-coded information on the disk, a laser burns holes or pits into its smooth metal or plastic surface. Later, to read the information stored there, the device measures the refraction of the laser's light off the disk's surface. Due to the physical change of the disk's surface, information cannot be overwritten or erased.

"One has a paper, a pencil and no eraser," explained Mr. Le Carvenec at Thomson-CSF.

"If you could produce an alterable optical disk," said Mr. Heys, "it would improve its attraction by an order of magnitude." But he calls this development "something beyond the horizon."

Manufacturers are more optimistic. Matsushita demonstrated the first erasable disk in April 1983. The company expects to commercialize the product by 1986, according to Mr. Jasionowski. Other electronics manufacturers, such as Sony and Hitachi, are reportedly working on the problem.

Although many public accounts of optical disk technology have been flush with predictions that it will replace existing magnetic-based storage media, the manufacturers interviewed were more moderate in their projections.

"Our belief is that the write-once disk will have relatively little impact on the magnetic media industry," said Mr. Knight, who directed the development of Shugart's optical disk at Xerox's Palo Alto (California) Research Center.

"I think that it is going to displace part of the market for magnetic media," said Mr. Le Carvenec, "but it is not going to make everything obsolete."

"Magnetic media will always have a home," said Mr. DeKoster.

"It is an additional media," explained Martin McCoy, manager of the optical disk department at Storage Technology. "It will permit applications that were not possible before."

The archival storage of huge amounts of disparate types of information is seen as the optical disk's most immediate attraction.

"For archival storage it is certainly going to impose itself," predicted Bernard Petit, manager of financial services at the Crédit Commercial de France in Paris.

Although the marketplace is in its infancy, manufacturers are clearly expecting it to be segmented. They are offering products that run the gamut from Philips' stand-alone, multidisk "jukebox" library system, to the 8-inch, 700-million-character optical disk developed by Matsushita.

The largest single-disk system is offered by Storage Technology. Its 14-inch disk, unveiled in Europe in March, can store 4 billion characters. The company plans to link the device to large mainframe computers for information-intensive applications such as the storage of medical X-ray films.

The lucrative office-automation and personal-computer markets certainly will induce manufacturers to develop smaller, desktop optical disk units that offer less memory at lower cost.

Manufacturers, such as International Business Machines, are looking at the possibility of transforming laser-based compact audio disks, currently used to store analog sound signals, into digital data storage devices.

But manufacturers are already looking for ways to expand the memory of their optical disks. Storage Technology projects that optical memory will increase by a factor of 10 in the next 20 years.

— AMIEL KORNEL

Individual Executive Offices In The U.S.A.



Establish your U.S.A. office in one of these premier business locations. HQ Executive Centers include custom furnished or unfurnished offices, a professional staff and state-of-the-art telecommunications and business services. All for less than the cost of a secretary alone!

New York
212/949-0722
Telex 425170 HQ NYC

Los Angeles
213/627-9111
Telex 181083 HQ LA LSA

Houston
713/650-1133
Telex 4620670 HQ DNTN HOU

San Francisco
415/781-5000
Telex 171041 HQ SFO

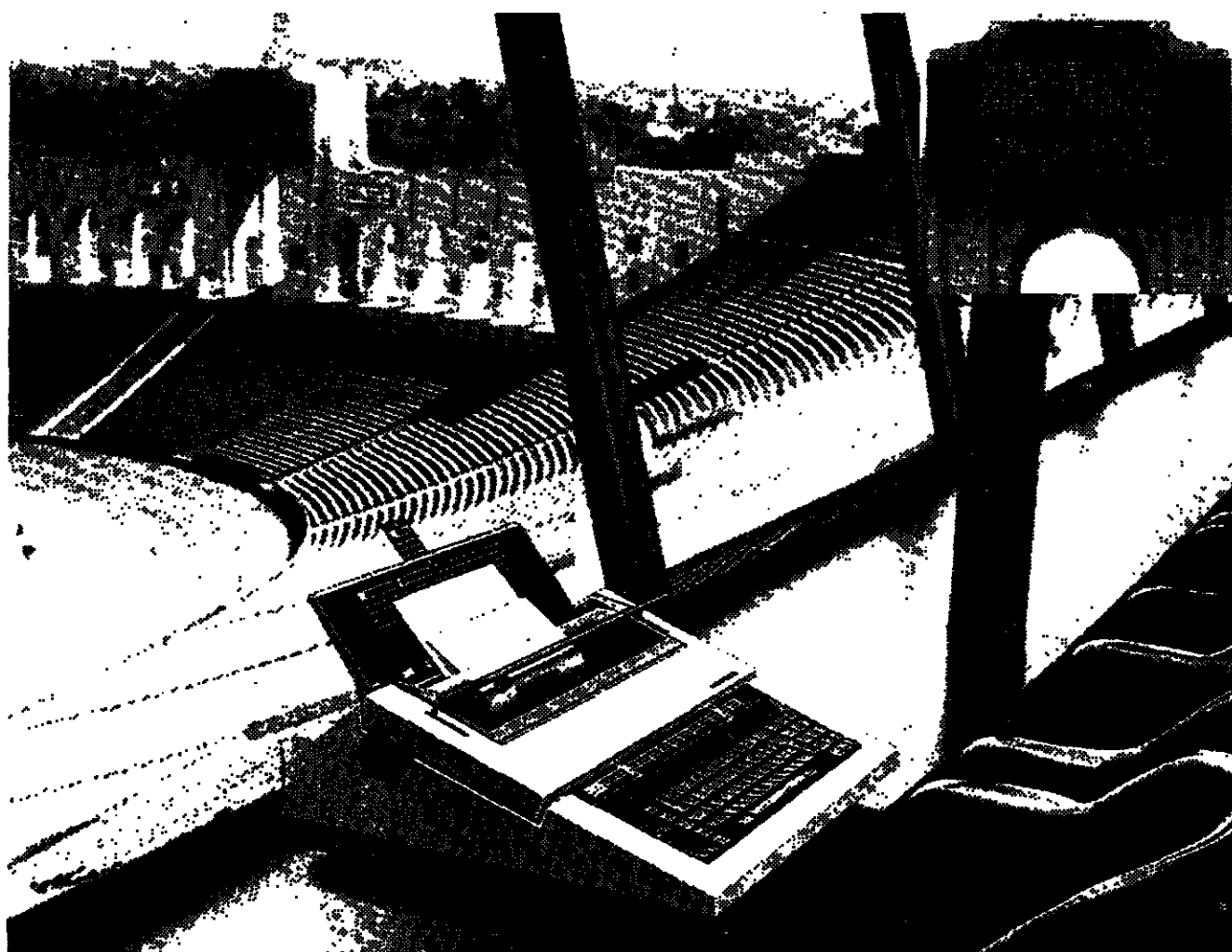
Honolulu
808/523-0966
Telex 634269 HQ HON

Washington D.C.
202/429-1777
Telex 248281 HQ DC

HQ
SERVICES & OFFICES

HQ is a trademark of Headquarters Companies — a United Technologies company

Headquarters Companies — Centers Nationwide



Gear-Up For The Olympics With Brother

Being selected to compete in the Olympic Games takes years of hard work and training. The same can be said for being designated by the Los Angeles Olympic Committee as their official typewriter. Through many long years of making typewriters, Brother has gained the experience and reputation for quality that are necessary to produce a machine sophisticated enough to gain such acceptance.

The forerunner among electronic typewriters, EM series machines employ an ultra-light-touch keyboard that will allow typists to type at record-breaking speed. They won't be tripped up by typeface or ribbon changes either, for Brother's cassette-enclosed daisy wheel and ribbons slip in cleanly and effortlessly.

Official Typewriter of the Los Angeles 1984 Olympic Games



"Who makes good things, makes good friends"

brother
Electronic Office Typewriters

Brother Industries, Ltd., Nagoya, Japan

The EM-200 with its 16 character display and 8K memory allows storing text and phrases, and detection and correction of errors before they're printed. The correction memory on both the EM-200 and EM-100 permits automatic correction of the previous 500 characters. Press a button and you are automatically relocated to the position that you started from. But what really puts our EM series ahead of the competition is its reliability through many years of use. All typewriters wearing the Brother EM symbol are winners of one of the most severe testing courses ever devised for office machines.

By producing the "Official Typewriter of the Los Angeles 1984 Olympic Games", the efficiency experts at Brother have again shown their sophistication in high-quality office machines.

For more information, please contact Brother Sales Office. Brother International Europe Ltd., 100, Victoria Road, London W14 9JF. Brother International Corporation (USA) Ltd., 100, Victoria Road, London W14 9JF. Brother International GmbH, 100, Victoria Road, London W14 9JF. Brother International (Australia) Pty. Ltd., 100, Victoria Road, London W14 9JF. Brother International (Canada) Ltd., 100, Victoria Road, London W14 9JF. Brother International (France) S.A., 100, Victoria Road, London W14 9JF. Brother International (Germany) GmbH, 100, Victoria Road, London W14 9JF. Brother International (Italy) S.p.A., 100, Victoria Road, London W14 9JF. Brother International (Japan) Ltd., 100, Victoria Road, London W14 9JF. Brother International (Korea) Ltd., 100, Victoria Road, London W14 9JF. Brother International (Spain) S.A., 100, Victoria Road, London W14 9JF. Brother International (Sweden) AB, 100, Victoria Road, London W14 9JF. Brother International (Switzerland) S.A., 100, Victoria Road, London W14 9JF. Brother International (Taiwan) Ltd., 100, Victoria Road, London W14 9JF. Brother International (Thailand) Ltd., 100, Victoria Road, London W14 9JF. Brother International (U.K.) Ltd., 100, Victoria Road, London W14 9JF. Brother International (U.S.A.) Ltd., 100, Victoria Road, London W14 9JF. Brother International (West Germany) GmbH, 100, Victoria Road, London W14 9JF. Brother International (Yugoslavia) Ltd., 100, Victoria Road, London W14 9JF.

People Who Hate Paper

(Continued From Page 9)

as president of the Washington-based Electronic Mail Association, are a dramatic reduction in time spent reaching the right person by telephone, the simplification of internal communications, the elimination of "antiquated" delivery systems, and an end to time zone problems.

"You can't just pick up the telephone and say, 'In reference to your memo... We're social animals,'" said Mr. Coughenour. With electronic mail, however, the small talk is eliminated and the task at hand, he added, can be dealt with rapidly.

Some companies rely exclusively on their own equipment for electronic mail networks. Others cut down on start-up costs by relying on the services of commercial vendors. Costs to users vary, depending on hardware, software, and flexibility of the service.

The U.S. Postal Service, for example, lets subscribers send letters from their computers to distribution points across the country, where they are printed, put in envelopes, and delivered by letter carriers. The service, E-Mail (electronic, computer-originated mail) is inexpensive, but delivery may take two days. In Canada, a year-old service permits next-day delivery. Delivery

of a two-page letter costs users less than two Canadian dollars.

These services, while often faster than traditional mail, do not offer instantaneous communications. MCI Mail, a recently inaugurated commercial service that offers next-day and same-day delivery of electronically generated mail, offers instant communications, as well. Subscribers are assigned electronic mailboxes; to leave a letter in someone's mailbox costs \$1. For businesses that can benefit from electronic mail, but cannot justify a large capital expenditure for hardware, commercial vendors like MCI Mail can be adequate.

Some larger businesses, like Citibank, have developed their own internal systems for instant communications. Because equipment and usage varies, typical costs are difficult to calculate. But users of electronic mail report significant declines in interoffice memos, telephone time and photocopy machine use. Other businesses, however, do not focus on cost-saving factors; instead, electronic mail is viewed merely as a more efficient way of doing business.

Despite its advantages, electronic mail is by no means a panacea. As with other computer systems, there is the potential for unauthorized entry — an invasion of corporate privacy.

If clients abroad could call you for the price of a local call, how much more business could you do?

Then ring Service 800... you get an instant demonstration of how this system works because your local call will be transferred toll-free to our Swiss headquarters.

AMSTERDAM	27 20 38	HAMBURG	44 25 18	MUNICH	129 42 16
BAHRAIN	23 42 41	HELSINKI	64 02 50	NEW YORK	295 09 44
BARCELONA	30 22 82	HONG KONG	28 38 76	OSLO	41 61 15
BERLIN (WEST)	26 18 13	LOS ANGELES	88 30 88	PARIS	160 79 0800
BRUSSELS	21 18 28 68	LONDON	628 37 51	SINGAPORE	338 09 00
COPENHAGEN	04 30 00 08	LUGANO	58 08 29	STOCKHOLM	21 17 27
DUBLIN	22 61 26	LUXEMBOURG	48 45 58	STUTTGART	27 03 13
FRANKFURT	29 28 00	MADRID	402 61 31	VIENNA	54 11 66
GENEVA	28 12 27	MILAN	345 23 98	ZURICH	302 08 12

Service 800 S.A., rue du Collège 18, 1260 Nyon, Switzerland



Service 800.

VISIT US AT THE HANNOVER FAIR (AMERICAN PAVILION)

Puts your most distant customer right next door.

هكزامن الأوسل

OFFICE AUTOMATION

Investing to Solve Efficiency Problems

By Al Senia

LOS ANGELES — Whenever a secretary called in sick, a major problem would arise at Price Brothers in Dayton, Ohio. Since each manager at the medium-sized manufacturing company had an individual secretary assigned to him, unexpected absences threw a wrench into the system. Replacements would be unfamiliar with the style and routine of the individual managers. Confusion would reign. If the illness or absence lasted more than a few days, typing and clerical work would backlog.

"There was just a lot of inefficiency," said Lee Byers, vice president for administration. To solve the problem, Price Brothers utilized a strategy that is becoming more commonplace for the business establishment — they called in an independent, outside consultant specializing in office automation to study the problem and recommend solutions.

After a six-month study, secretaries and clerical workers were placed under a newly formed management systems group. Word processors replaced typewriters, individual managers sent clerical and typing chores to a secretarial pool and procedures were written down and formalized for each area so that even temporary replacements could quickly learn the process.

Now productivity is up 30 to 40 percent from what it was before. "The dollar savings was not the motivating factor in doing this," Mr. Byers said. "Efficiency was the main reason. Any other savings were just a byproduct of that efficiency."

Officials at Price Brothers are pleased at the outcome. Their experience is being increasingly repeated throughout the United States and Western Europe as businesses of all types turn to office-automation specialists for solutions to their problems.

Office automation always has been part of business and industry. But the rapid growth in the last three years of items like desk-size personal computers, word processors and new, sophisticated business software packages has created confusion in the field and opened up new opportunities for the office-automation specialists.

"Personal computers aren't the answer for everything," said Mary Ruprecht, of Mary M. Ruprecht Associates in Duluth, Minnesota. "But there's so much advertising being done and so much hype that a lot of people feel they can go out and buy them and they will solve all their needs. The face of office automation has changed significantly. The small machines have brought automation in the [price] range of nearly every business. They can cost justify it very rapidly."

A certified, independent office automation specialist for more than 15 years, Ms. Ruprecht was called in to solve the inefficiency problems at Price Brothers. She has worked for small- and medium-size business clients that include medical facilities, attorneys, insurance companies, manufacturing plants, financial institutions and educational institutions in the United States and overseas. She also is the author of a recently published book, "Managing Office Automation."

Like many such consultants, Ms. Ruprecht provides feasibility studies, floor-plan designs, assistance in hardware and software selection, strategic planning and in-house equipment training. She charges a daily rate

based upon the size of the modernization project and the number of people involved.

A one-day overview of office operations and a series of verbal suggestions can cost as little as \$3,000 to \$4,000. On the other hand, the full range of services can cost more than \$25,000.

For Price Brothers, Ms. Ruprecht spent six weeks studying the company's needs. During that time she met and worked regularly with a special task force composed of management and workers. She devised a plan that included restructuring of the secretarial and clerical functions, the use of a central dictation bank for management, the selection of word-processing equipment and the choosing of the proper business software program. Approximately 36 clerical workers and secretaries were affected by the recommendations, although other offices were automated later. It took three months to implement the initial proposal. Six months later her firm conducted a productivity review to study how the plan was working.

The cost for such services to medium-size companies is approximately \$20,000. Mr. Byers said such an investment is well worth it from an efficiency standpoint. Problems caused by absenteeism have lessened. Also, the reorganization opened up career advancement opportunities for the clerical work force that did not exist before since clerks and secretaries were tied to one particular department or individual.

"I won't say there weren't any problems because any time you make changes like that in the system, of course there are going to be problems," Mr. Byers said. "But we've pretty well overcome all the difficulties."

"Given enough time, someone within the company might have been able to do it, but it would have been a hell of a lot of grunt work, interviews with the people involved and time spent selecting the right equipment. We're satisfied with the results."

Businesses choosing to call in office automation consultants can choose any number of options, of course. Major accounting and consulting firms like Arthur Little and Co. have established their own office automation divisions. Many major hardware manufacturers also are entering the market.

By turning to the manufacturers — who, of course, recommend their own equipment — customers lose the independent advice that consultants like Ms. Ruprecht provide.

For example, Hewlett Packard, a computer hardware manufacturer based in Palo Alto, California, in the state's Silicon Valley high-tech corridor, recently established an office-automation division. The firm, like its competitors, holds office-automation conferences to introduce new products to the business community.

"By tightly integrating the functions of personal computers, secretarial workstations, departmental computers and office software, we believe HP will fulfill a significant need in the marketplace," said Edward R. McCracken, general manager of the company's business development group. "And we expect the market to be a significant one — close to \$23 billion by 1988."

Swiftly merging markets for data processing, personal computing, office automation and networking communications have led the company to market a program called the Personal Productivity Center, which

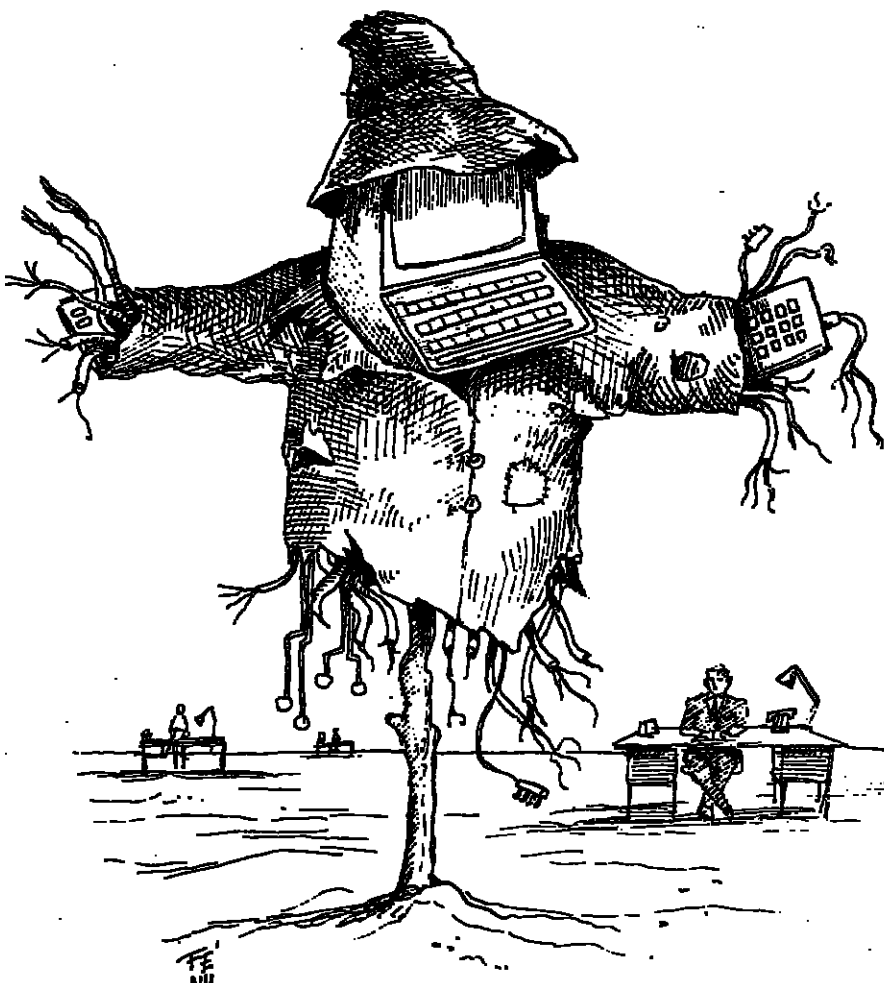
links personal computers into powerful data bases or office software on larger computers.

Many consultants involved in office automation say the computer boom of the last three years has dramatically altered the field and created a much more sophisticated market with a myriad of needs. Often the automation issue for a company involves broader issues that encompass basic management practices.

"In a diversified, autonomous company what you are doing is really

writing policies and standards," said Leon Jackson, a senior consultant specializing in office automation for Arthur Little.

As a result, in his consulting sessions he attempts to involve top management at the outset since they will be greatly affected by the changes a consultant will bring about. "There are tremendous organizational and security issues being raised," Mr. Leon said. "The planning should be top-management-directed. My mission is to get to the higher levels [of a company] as quickly as possible."



CONTRIBUTORS

AL FURST is an editor at the Boston-based Electronic Business magazine.

SARAH GLAZER is an associate editor at the Boston-based Mini-Micro Systems magazine.

ALAN GREEN, a Washington writer, is co-author of "The Phone Book" and is owner and editor of The City Desk, a Washington bureau for city and regional magazines.

AMIEL KORNEL, who writes frequently on technology, is on the staff of the International Herald Tribune.

JONATHAN MILLER is the managing editor of Communications Daily and Satellite Week, and the U.S. editor of Connections: World Communications Report.

AL SENIA is the West Coast editor of Iron Age, a business publication on the metal-working industries, and a frequent contributor to The Washington Post.

JOHN L. WOLFE is assistant editor of International Videotext Teletext News and TeleServices Report, a Washington-based publication that analyzes electronic banking development.

Stress of Computers Can Lead to Bad Health — and Errors

By David L. Holzman

SOLANA BEACH, California — With the advent of office automation, the work of entering data into the computer moved from the back office into the front office — and with it came the unpleasant working conditions. The majority of data-entry work for banks, brokerage firms, credit-card and insurance companies still is done in the back office, or what has become known as the "computer plantation."

Once known as keypunch operators, they now are called data-entry clerks. On the average, they do about 11,000 keystrokes an hour, tend to be primarily black, work a 40-hour week, with two small rest breaks a day, and 75 percent of their employers run second and third shifts.

With office automation, front-office clerical workers now find themselves locked into shifts of six to eight hours at computer terminals, and the results have often been disastrous. Asking these overworked, stress-laden operators to handle sensitive documents and forms is like asking galley slaves to relay the boatwain's soundings up to the bridge.

The results were predictable as millions of Americans became the victims of bounced checks, rejection of credit, bills for merchandise never ordered or cancellations of insurance policies for unexplained reasons. Not only does the public suffer, but major institutions, according to a Fortune magazine article, also experienced the same chaos. The National Bank of Washington unintentionally increased the quarterly dividend of Giant Food tenfold. The dividend was supposed to be 25 cents, but a keyboard operator made a mistake in placing the decimal point and thereby raised the sum to \$2.50. Checks for \$11,680,000, rather than \$1,168,000 were printed by the computer and mailed.

One major problem involved the fourth-largest U.S. bank, Manufacturers Hanover Trust. Over a three-week period they reported billions of dollars entering the nation's money supply, which led everyone to believe that the money supply was expanding and the U.S. Federal Reserve Board would clamp down on credit. The repercussions were felt in the stock and bond markets, and calm returned only after a Manufacturers Hanover spokesman publicly admitted the errors and claimed they came from "filling out a new form." What was left unsaid, but presumably true, was that the forms were filled out by data-entry operators and fed into a computer.

Despite claims of improved productivity, service to customers and job satisfaction, the evidence is mounting that the computer is making things worse in the office. As most white-collar workers know, tension and stress existed in the office long before office automation. A U.S. government study confirms their opinion.

"Clerical workers, especially those who have children, are twice as more likely to suffer heart disease than professional women clerical workers, such as secretaries, bookkeepers, bank cashiers and clerks, who had children at home, worked out of economic necessity, had nonsupportive bosses and suffered suppressed anger and were more likely to develop chest pains and other coronary symptoms of heart diseases," the study noted.

According to the psycho-social study, the same women demonstrated the highest scores for suppressed anger. "They had almost no control over their jobs," said Suzanne G. Haynes, an epidemiologist and principal investigator of the study. "They were told what to do and when to do it. They had no freedom of movement. The worst stress of all is in the

inabilities to control your life, even in the small ways."

Into this tense environment came office automation, with the potential for dehumanizing supervision and absorbing much of the judgment clerical jobs used to entail. Another study at the Massachusetts Institute of Technology by Shoshannah Zuboff reports the problems of a linotype operator whose job was automated. "Instead of working that big cold-type printing contraption with all the crafty judgment it required, she now works at a computer terminal where she types information into a visual display unit," the report cited.

Visual display units, also known as visual display terminals (VDTs) or cathode ray tubes (CRTs), have been linked to stress and other psychological and physical ills by a number of studies. It was originally alleged that radiation from the tubes caused cataracts and even cancer. But a study by the U.S. Public Health Service, reported in a Wall Street Journal article last year, dispelled the cataract and cancer fears, while upholding the findings that eye strain, backaches, headaches, nausea, high blood pressure, loss of sleep, anxiety and stress were higher among VDT operators than among clerical workers who had comparable jobs, but did the work manually.

"The clerical workers using the VDTs reported by far the most physical and mental stress," said Barbara Cohen, a research psychologist who helped conduct the study.

David L. Holzman has been involved for over 25 years in developing new markets for computer technology. He is currently at the University of California at San Diego.

Advanced technology is not an aim in itself; it is meant to meet market requirements and win.

French designed GOUPIIL 3 is in this respect one of the most performant and revolutionary microcomputers.

It incorporates the whole range of world-wide software standards commonly acknowledged as the best.

It is a standard international product, and still a highly

modular system, with 7 different Disc Operating Systems, particularly broad-minded with 3 microprocessors available, and top teleprocessing capabilities.

GOUPIIL's success relies of course on its technical soundness, but also on the large servicing support carried out through the whole world. From Paris to Johannesburg, from Lisbon to Bangkok, GOUPIIL chooses the best

specialists for its agents, and trains them actively.

Our International Network Agents promote GOUPIIL in their own country, the New French Connection.

If you also wish to join in the GOUPIIL Connection, please get in touch with Patrice ROUCAYROL, 9 rue Huysmans, 75006 PARIS, Tél. 33 (1) 549.19.19, Tlx 201676 SMTEXP.

THE NEW FRENCH CONNECTION IS ADVANCED TECHNOLOGY.



goupil
GOUPIIL, THE FRENCH MICROCOMPUTER

its abroad could
you for the price
a local call,
much more
s could you de

Service 800
1-800-800-8000

...show
...confidence as
...York Lag

How Morgan Bank Nederland serves multinationals in the Netherlands-and worldwide



Morgan officers shown in Amsterdam are, from right: Andrew Peacock, president of Morgan Bank Nederland; Michael Enthoven, manager, corporate finance, Morgan Guaranty Ltd; Theo Röell and Tom van Dort, managing directors, Morgan Bank Nederland.

Morgan Bank Nederland is the Dutch subsidiary of Morgan Guaranty Trust Company of New York. We specialize in wholesale banking and corporate finance for multinational companies and institutional investors, both in the Netherlands and around the world.

From our headquarters in Amsterdam, Morgan Bank Nederland's banking officers and treasury specialists give clients the responsiveness and careful attention traditional in Dutch banking. At the same time we draw on the multiple resources of Morgan's worldwide network to meet the increasingly sophisticated credit, operational, and advisory requirements of domestic and multinational corporations.

Innovative financial structures
For example, we work closely with Morgan Guaranty Ltd, Morgan's London-based Euro-

market financing subsidiary, to find innovative, cost-effective financial structures for Dutch borrowers in the international capital markets. We not only respond to our clients' special needs but also help them take advantage of fast changing market developments.

The treasury and foreign exchange experts at Morgan Bank Nederland operate in all the important markets, executing transactions and managing risk exposure. Our advisory team, linked to Morgan's global exchange trading desks, alerts customers to hedging and arbitrage opportunities.

Banking and securities

In corporate banking we're giving imaginative aid and counsel to Dutch companies at home and as they expand outside the Netherlands. We also provide a broad range of services to Dutch-

based subsidiaries of foreign multinationals.

As a full member of the Amsterdam Stock Exchange, Morgan Bank Nederland offers professional execution of orders in the Netherlands and abroad. We help clients in the Netherlands and other countries to achieve their funding and investment goals through both public transactions and private placements.

Another important service is domestic and cross-border leasing, through our wholly owned subsidiary Leaseco Nederland. And we advise on mergers, acquisitions, and divestitures.

We invite your inquiry

We will welcome the opportunity to discuss your needs in the international financial markets. Write or call Andrew J. Peacock, President, Morgan Bank Nederland N.V., Tesselschadestraat 12, 1054 ET Amsterdam. Telephone 020-160011.

Morgan Bank Nederland

OTC From

NYSE Most Actives										
Symbol	Vol.	High	Low	Open	Close	Change	Vol.	High	Low	
AT&T	1,234,567	123.45	122.34	122.34	122.34	0.00	IBM	987,654	156.78	155.67
IBM	987,654	156.78	155.67	155.67	155.67	0.00	GE	876,543	45.67	44.56
GE	876,543	45.67	44.56	44.56	44.56	0.00	AMC	765,432	23.45	22.34
AMC	765,432	23.45	22.34	22.34	22.34	0.00	AMT	654,321	34.56	33.45
AMT	654,321	34.56	33.45	33.45	33.45	0.00	GO	543,210	12.34	11.23
GO	543,210	12.34	11.23	11.23	11.23	0.00	DIS	432,109	28.90	27.79
DIS	432,109	28.90	27.79	27.79	27.79	0.00	INTL	321,098	18.76	17.65
INTL	321,098	18.76	17.65	17.65	17.65	0.00	WAT	210,987	15.43	14.32
WAT	210,987	15.43	14.32	14.32	14.32	0.00	TRW	109,876	10.21	9.10
TRW	109,876	10.21	9.10	9.10	9.10	0.00	BA	98,765	8.90	7.79
BA	98,765	8.90	7.79	7.79	7.79	0.00	GM	87,654	6.78	5.67
GM	87,654	6.78	5.67	5.67	5.67	0.00	MS	76,543	4.56	3.45
MS	76,543	4.56	3.45	3.45	3.45	0.00	CVX	65,432	3.21	2.10
CVX	65,432	3.21	2.10	2.10	2.10	0.00	WY	54,321	2.09	1.98
WY	54,321	2.09	1.98	1.98	1.98	0.00	SL	43,210	1.87	1.76
SL	43,210	1.87	1.76	1.76	1.76	0.00	AM	32,109	1.65	1.54
AM	32,109	1.65	1.54	1.54	1.54	0.00	MD	21,098	1.43	1.32
MD	21,098	1.43	1.32	1.32	1.32	0.00	UN	10,987	1.21	1.10
UN	10,987	1.21	1.10	1.10	1.10	0.00	RT	9,876	1.09	0.98
RT	9,876	1.09	0.98	0.98	0.98	0.00	PR	8,765	0.87	0.76
PR	8,765	0.87	0.76	0.76	0.76	0.00	DU	7,654	0.65	0.54
DU	7,654	0.65	0.54	0.54	0.54	0.00	MO	6,543	0.43	0.32
MO	6,543	0.43	0.32	0.32	0.32	0.00	TT	5,432	0.21	0.10
TT	5,432	0.21	0.10	0.10	0.10	0.00	CL	4,321	0.09	0.98
CL	4,321	0.09	0.98	0.98	0.98	0.00	ST	3,210	0.87	0.76
ST	3,210	0.87	0.76	0.76	0.76	0.00	MT	2,109	0.65	0.54
MT	2,109	0.65	0.54	0.54	0.54	0.00	WT	1,098	0.43	0.32
WT	1,098	0.43	0.32	0.32	0.32	0.00	HT	987	0.21	0.10
HT	987	0.21	0.10	0.10	0.10	0.00	BT	876	0.09	0.98
BT	876	0.09	0.98	0.98	0.98	0.00	LT	765	0.87	0.76
LT	765	0.87	0.76	0.76	0.76	0.00	ET	654	0.65	0.54
ET	654	0.65	0.54	0.54	0.54	0.00	RT	543	0.43	0.32
RT	543	0.43	0.32	0.32	0.32	0.00	PT	432	0.21	0.10
PT	432	0.21	0.10	0.10	0.10	0.00	DT	321	0.09	0.98
DT	321	0.09	0.98	0.98	0.98	0.00	CT	210	0.87	0.76
CT	210	0.87	0.76	0.76	0.76	0.00	FT	109	0.65	0.54
FT	109	0.65	0.54	0.54	0.54	0.00	TT	98	0.43	0.32
TT	98	0.43	0.32	0.32	0.32	0.00	LT	87	0.21	0.10
LT	87	0.21	0.10	0.10	0.10	0.00	ET	76	0.09	0.98
ET	76	0.09	0.98	0.98	0.98	0.00	RT	65	0.87	0.76
RT	65	0.87	0.76	0.76	0.76	0.00	PT	54	0.65	0.54
PT	54	0.65	0.54	0.54	0.54	0.00	DT	43	0.43	0.32
DT	43	0.43	0.32	0.32	0.32	0.00	CT	32	0.21	0.10
CT	32	0.21	0.10	0.10	0.10	0.00	FT	21	0.09	0.98
FT	21	0.09	0.98	0.98	0.98	0.00	TT	10	0.87	0.76
TT	10	0.87	0.76	0.76	0.76	0.00	LT	9	0.65	0.54
LT	9	0.65	0.54	0.54	0.54	0.00	ET	8	0.43	0.32
ET	8	0.43	0.32	0.32	0.32	0.00	RT	7	0.21	0.10
RT	7	0.21	0.10	0.10	0.10	0.00	PT	6	0.09	0.98
PT	6	0.09	0.98	0.98	0.98	0.00	DT	5	0.87	0.76
DT	5	0.87	0.76	0.76	0.76	0.00	CT	4	0.65	0.54
CT	4	0.65	0.54	0.54	0.54	0.00	FT	3	0.43	0.32
FT	3	0.43	0.32	0.32	0.32	0.00	TT	2	0.21	0.10
TT	2	0.21	0.10	0.10	0.10	0.00	LT	1	0.09	0.98
LT	1	0.09	0.98	0.98	0.98	0.00	ET	0	0.87	0.76
ET	0	0.87	0.76	0.76	0.76	0.00	RT	0	0.65	0.54
RT	0	0.65	0.54	0.54	0.54	0.00	PT	0	0.43	0.32
PT	0	0.43	0.32	0.32	0.32	0.00	DT	0	0.21	0.10
DT	0	0.21	0.10	0.10	0.10	0.00	CT	0	0.09	0.98
CT	0	0.09	0.98	0.98	0.98	0.00	FT	0	0.87	0.76
FT	0	0.87	0.76	0.76	0.76	0.00	TT	0	0.65	0.54
TT	0	0.65	0.54	0.54	0.54	0.00	LT	0	0.43	0.32
LT	0	0.43	0.32	0.32	0.32	0.00	ET	0	0.21	0.10
ET	0	0.21	0.10	0.10	0.10	0.00	RT	0	0.09	0.98
RT	0	0.09	0.98	0.98	0.98	0.00	PT	0	0.87	0.76
PT	0	0.87	0.76	0.76	0.76	0.00	DT	0	0.65	0.54
DT	0	0.65	0.54	0.54	0.54	0.00	CT	0	0.43	0.32
CT	0	0.43	0.32	0.32	0.32	0.00	FT	0	0.21	0.10
FT	0	0.21	0.10	0.10	0.10	0.00	TT	0	0.09	0.98
TT	0	0.09	0.98	0.98	0.98	0.00	LT	0	0.87	0.76
LT	0	0.87	0.76	0.76	0.76	0.00	ET	0	0.65	0.54
ET	0	0.65	0.54	0.54	0.54	0.00	RT	0	0.43	0.32
RT	0	0.43	0.32	0.32	0.32	0.00	PT	0	0.21	0.10
PT	0	0.21	0.10	0.10	0.10	0.00	DT	0	0.09	0.98
DT	0	0.09	0.98	0.98	0.98	0.00	CT	0	0.87	0.76
CT	0	0.87	0.76	0.76	0.76	0.00	FT	0	0.65	0.54
FT	0	0.65	0.54	0.54	0.54	0.00	TT	0	0.43	0.32
TT	0	0.43	0.32	0.32	0.32	0.00	LT	0	0.21	0.10
LT	0	0.21	0.10	0.10	0.10	0.00	ET	0	0.09	0.98
ET	0	0.09	0.98	0.98	0.98	0.00	RT	0	0.87	0.76
RT	0	0.87	0.76	0.76	0.76	0.00	PT	0	0.65	0.54
PT	0	0.65	0.54	0.54	0.54	0.00	DT	0	0.43	0.32
DT	0	0.43	0.32	0.32	0.32	0.00	CT	0	0.21	0.10
CT	0	0.21	0.10	0.10	0.10	0.00	FT	0	0.09	0.98
FT	0	0.09	0.98	0.98	0.98	0.00	TT	0	0.87	0.76
TT	0	0.87	0.76	0.76	0.76	0.00	LT	0	0.65	0.54
LT	0	0.65	0.54	0.54	0.54	0.00	ET	0	0.43	0.32
ET	0	0.43	0.32	0.32	0.32	0.00	RT	0	0.21	0.10
RT	0	0.21	0.10	0.10	0.10	0.00	PT	0	0.09	0.98
PT	0	0.09	0.98	0.98	0.98	0.00	DT	0	0.87	0.76
DT	0	0.87	0.76	0.76	0.76	0.00	CT	0	0.65	0.54
CT	0	0.65	0.54	0.54	0.54	0.00	FT	0	0.43	0.32
FT	0	0.43	0.32	0.32	0.32	0.00	TT	0	0.21	0.10
TT	0	0.21	0.10	0.10	0.10	0.00	LT	0	0.09	0.98
LT	0	0.09	0.98	0.98	0.98	0.00	ET	0	0.87	0.76
ET	0	0.87	0.76	0.76	0.76	0.00	RT	0	0.65	0.54
RT	0	0.65	0.54	0.54	0.54	0.00	PT	0	0.43	0.32
PT	0	0.43	0.32	0.32	0.32	0.00	DT	0	0.21	0.10
DT	0	0.21	0.10	0.10	0.10	0.00	CT	0	0.09	0.98
CT	0	0.09	0.98	0.98	0.98	0.00	FT	0	0.87	0.76
FT	0	0.87	0.76	0.76	0.76	0.00	TT	0	0.65	0.54
TT	0	0.65	0.54	0.54	0.54	0.00	LT	0	0.43	0.32
LT	0	0.43	0.32	0.32	0.32	0.00	ET	0	0.21	0.10
ET	0	0.21	0.10	0.10	0.10	0.00	RT	0	0.09	0.98
RT	0	0.09	0.98	0.98	0.98	0.00	PT	0	0.87	0.76
PT	0	0.87	0.76	0.76	0.76	0.00	DT	0	0.65	0.54
DT	0	0.65	0.54	0.54	0.54	0.00	CT	0	0.43	0.32
CT	0	0.43	0.32	0.32	0.32	0.00	FT	0	0.21	0.10
FT	0	0.21	0.10	0.10	0.10	0.00	TT	0	0.09	0.98
TT	0	0.09	0.98	0.98	0.98	0.00	LT	0	0.87	0.76
LT	0	0.87	0.76	0.76	0.76	0.00	ET	0	0.65	0.54
ET	0	0.65	0.54	0.54	0.54	0.00	RT	0	0.43	0.32
RT	0	0.43	0.32	0.32	0.32	0.00	PT	0	0.21	0.10
PT	0	0.21	0.10	0.10	0.10	0.00	DT	0	0.09	0.98
DT	0	0.09	0.98	0.98	0.98	0.00	CT	0	0.87	0.76
CT	0	0.87	0.76	0.76	0.76	0.00	FT	0	0.65	0.54
FT	0	0.65	0.54	0.54	0.54	0.00	TT	0	0.43	0.32
TT	0	0.43	0.32	0.32	0.32	0.00	LT	0	0.21	0.10
LT	0	0.21	0.10	0.10	0.10	0.00	ET	0	0.09	0.98
ET	0	0.09	0.98	0.98	0.98	0.00	RT	0	0.87	0.76
RT	0	0.87	0.76	0.76	0.76	0.00	PT	0	0.65	0.54
PT	0	0.65	0.54	0.54	0.54	0.00	DT	0	0.43	0.32
DT	0	0.43	0.32	0.32	0.32	0.00	CT	0	0.21	0.10
CT	0	0.21	0.10	0.10	0.10	0.00	FT	0	0.09	0.98
FT	0	0.09	0.98	0.98	0.98	0.00	TT	0	0.87	0.76
TT	0	0.87	0.76	0.76	0.76	0.00	LT	0		

BUSINESS ROUNDUP

Akzo's Earnings Soared by 160% During Last Year

ARNHEM, Netherlands — Akzo NV's profit last year soared 160 percent, the company said Tuesday. It also said that it plans to expand in the United States in coming years, giving priority to a strengthening of its position in the pharmaceutical market.

It said that it would maintain its strong position in Europe, particularly in the Netherlands and West Germany, which accounted for about a third and a quarter, respectively, of 1983's sales of 15.09 billion guilders (\$2.15 billion).

Akzo earned 428 million guilders in 1983, up 160 percent from a year earlier. It expects a further rise this year, and per-share profit is expected to be at least the same as last year's 12.91 guilders, despite an increased number of shares.

Results for the first quarter of 1984 were in line with those in the final 1983 quarter, when profit rose to 143.7 million guilders from 49.8 million a year earlier, the company said. Akzo earned 36.8 million guilders in the first 1983 quarter.

CIT-Alcatel Predicts Substantial Profit Rise

PARIS — CIT-Alcatel, a subsidiary of France's government-owned Cie. Générale d'Electricité, will post a consolidated net profit for 1983 that is significantly higher than the 73.7-million-franc (\$9.1-million) profit it registered during 1982, the company's chairman, Georges Peberau, said Tuesday in a letter to stockholders.

He gave no figures but attributed the improvement to stronger performance by many of the group's subsidiaries and to capital gains from the transfer of its Sintra Alcatel and Transac Alcatel subsidiaries to government-owned Thomson-CSF as part of an asset swap last year.

Mr. Peberau told stockholders that parent company volume in 1983 rose 9.7 percent from the 5.23 billion recorded in 1982. Export sales were up 18.5 percent in the same period and orders were maintained at the high level attained in

1982, he said, but provided no figures for either year.

The chairman said most of the 1983 orders for public telephone-exchange systems came from clients who had already purchased the group's E-10 system. However, three nations — Algeria, Nicaragua and Pakistan — did become E-10 customers for the first time in 1983, he added.

Mr. Peberau said operations of Telic Alcatel, the group's private telecommunications subsidiary, grew substantially in 1983 and should continue to grow in 1984, with "remarkable progress" in profits. He gave no figures, however.

CGA Alcatel and its U.S. subsidiary, Alta Alcatel, are being reorganized. Despite a 10-percent rise in CGA Alcatel's volume and a 25-percent gain in orders on 1982, the restructuring "weighed heavily on results in 1983 and will weigh on those of 1984," Mr. Peberau added without elaborating.

Record Bond For Japan Set By Matsushita

TOKYO — Matsushita Electric Industrial Co. will issue a 100-billion yen unsecured convertible bond on the Japanese domestic capital market, the largest to be offered in Japan by a private corporation, the company said Tuesday.

The current record size for a Japanese domestic convertible issue is the 80-billion-yen issue by Hitachi Ltd. in March.

Matsushita said the bond, maturing 1994 and par priced, will be underwritten by a syndicate led by Yamaichi Securities Co.

The coupon rate has not been determined, the company added.

Subscription will begin May 11 and end May 23, with payment May 25, Matsushita said. The bond will be convertible after July 2. Conversion terms will be announced later.

Krupp Orders Rose 19% in First Quarter

HANNOVER, West Germany — Fried Krupp GmbH said Tuesday that world group orders increased 19 percent to 4.7 billion Deutsche marks (\$1.8 billion) in the first quarter of 1984 from 3.8 billion DM in the like period last year.

Wilhelm Scheider, the board chairman, said group volume rose 2 percent from a year earlier to 3.4 billion DM. Orders for plant construction rose 113 percent during the three months to 1 billion DM. Heavy engineering orders rose 19 percent and steel orders 10 percent, he added.

The first-quarter figures confirmed Krupp's expectations that there would be an increase in new orders in 1984, Mr. Scheider said.

Krupp, which is 25.01 percent owned by Iran, had a net profit of 439 million DM in 1982, the last year for which full figures are available. Full 1983 sales are estimated to have exceeded 1982's 16.7 billion DM.

Latin States May Extend Deadline for Argentina

By Peter T. Kilborn
New York Times Service
WASHINGTON — Argentina could be allowed as much as three months to reimburse the four Latin American countries that helped it through its interest-payment crisis last weekend, Jesús Silva Herzog, the finance minister of Mexico, said here.

Mr. Silva Herzog, whom Treasury Secretary Donald T. Regan cited as the architect of the \$500-million loan agreement for Argentina, said Monday he expected Argentina to meet the 30-day repayment deadline that the participants in the agreement reported Saturday. If not, however, the deadline can be stretched for 60 days, he said.

He also emphasized the significance of four debtor nations' contributing to assist a fifth. The four Latin contributors to the Argentine accord — Mexico, Venezuela, Brazil and Colombia — conceived and pulled together the deal in three days at the meeting of the Inter-American Development Bank last week in Punta del Este, Uruguay, Mr. Silva Herzog said.

"We did it ourselves, without deputies or bureaucrats," he said. "It took only the political will of recognizing our interdependence. It shows our solidarity and the extent of our sense of responsibility."

Mr. Silva Herzog said he was in Washington on a "personal visit." He had lunch Monday at the Treasury Department with Mr. Regan and is expected to meet with International Monetary Fund officials.

Under the pact, Mexico and Venezuela each agreed to contribute \$100 million to the \$500-million fund. Brazil and Colombia each put up \$50 million. Argentina contributed \$100 million from its own reserves, and the creditor banks contributed \$100 million.

After 30 days or so, Mr. Regan said Saturday, Argentina and the IMF would sign a letter of intent under which the government of President Raúl Alfonsín would agree to a plan to stabilize the economy. Once the letter was signed, the U.S. Treasury would lend Argentina \$300 million in a swap

Brazil Hopes To Avoid New Debts in '84

By Alan Riding
New York Times Service
RIO DE JANEIRO — Brazil hopes to cover \$12 billion in interest payments owed on its foreign debt this year without resorting to new borrowing abroad, foreign bankers and local officials have said.

But much depends on achieving its target of a \$9.1-billion trade surplus, they cautioned on Monday. So far this year, they said, the country's export performance has been encouraging.

Other variables, however, are the course of international interest rates and Brazil's success in carrying out an austerity program approved by the International Monetary Fund.

"We're not anticipating any sudden crisis in Argentina," one foreign banker said. "The prices for Brazil's exports are good and the price of wheat and oil, its main imports, are steady. For the first time, there are signs that the public sector deficit is way down, that Brazil is complying with the IMF."

Approval of Brazil's economic policies by the IMF is an essential element in the country's short-term financial outlook. The fund monitors Brazil's performance and must give its approval each quarter. Without that approval, continuing disbursement of \$6.5 billion in commercial credits signed earlier this year and of \$3.8 billion from the fund itself might be suspended. Some \$2.4 billion of the \$6.3 billion of fresh credit was immediately returned to cover interest arrears for 1983.

The financial package signed with the country's creditor banks in January also included the postponement of \$5.5 billion in debt maturing in 1984, as well as the renewal of \$10 billion in trade credits and \$6 billion in interbank credits.

The greatest immediate concern appears to be Brazil's difficulty in bringing down inflation. Last year, inflation reached 211 percent, and prices have already risen 35 percent in 1984.

COMPANY NOTES

ACF Industries is the target of a takeover bid by an investor group headed by Carl C. Icahn. The group offered \$53 a share for ACF, even though shareholders are already scheduled to vote April 25 on a \$50-a-share offer from E.M. Warburg Fincos & Co. An ACF spokesman valued the latest offer at \$45.5 million. ACF makes oilfield equipment, railroad cars, auto parts and plastics.

Coleco Industries, the troubled home computer and game maker, told the U.S. Securities and Exchange Commission that its bankers had reduced the company's lines of credit by \$33 million since the beginning of the year.

Easton Corp. announced that it has acquired for undisclosed terms all of the businesses of Allied Corp.'s Bunker Ramo Electronic Systems, except for the anti-submarine-warfare product line. The divi-

sion is to produce military-computer hardware and software, microwave solid-state components and subsystems and electronic warfare receivers, the Cleveland-based company said.

KLM Royal Dutch Airlines reported that the Dutch government has converted 2 million of its preference shares into ordinary shares. KLM now has 7.89 million nominal 100-guilder (34.3-U.S.-cent) ordinary shares outstanding, 44.1 percent of which are held by the government. The state also holds 76.5 percent of KLM's priority shares and 2 million preference shares, putting its overall stake in the company at 55.4 percent.

Mitsubishi Corp. of Tokyo said its U.S. subsidiary, Auxix Inc., will form a partnership soon with Silverado Mines (U.S.) Inc. and Con Mining Ltd. of Canada to par-

ticipate in a gold mining project at Grant Mines, Alaska.

Shell Canada Ltd. notified its senior management of the conclusion of an internal study on the possibility of cutting jobs and moving the company headquarters from Toronto to Calgary. A spokeswoman said a "downsizing" of the company was in the works.

Sunshine Mining Co. decided to bypass resistant directors of Ranchers Exploration & Development Corp. and attempt to acquire the Albuquerque-based company from its shareholders. Sunshine offered to exchange 2.5 shares of its common stock for each share of Ranchers stock — an offer valued at \$37.19 per share of Ranchers stock.

Tesco Corp., in a continued cutback of its operations, agreed to sell its oil refinery in Bakersfield, California, to Seaside Oil Co., a

newly formed venture headed by Douglas Prestine, who left Tesco a year ago after serving a senior vice president. Terms were not disclosed by the company, based in Santa Monica, California.

Texas Instruments Inc. has been told by the U.S. Navy that it is withholding \$850 million in missile contracts until the company offered an acceptable performance warranty. It was the first time the navy has delayed a purchase under a law that took effect on March 15 that requires contractors to guarantee weapons' performance and workmanship.

Westpac Banking Corp. of Sydney said it will raise its prime rate to 15.5 percent from 14.5 percent effective April 10 because of increases in the cost of funds resulting from a tightening of liquidity caused by tax payments.

Texaco Acquires Social Interests

United Press International
WHITE PLAINS, New York — Texaco Inc. announced on Tuesday the completion of an agreement to acquire petroleum-marketing operations in six West European countries from Standard Oil Co. of California.

The announcement said contracts were signed Monday in Zurich by Texaco and its affiliates and by Standard and its Chevron affiliates and cover marketing operations in the Netherlands, Belgium, Luxembourg, Denmark, Britain and West Germany.

Texaco's chairman and chief executive, John K. McKinley, said the move strengthens the marketing of gasoline, diesel fuel and home-heating oil products for which the future is more dependable than heavier fuel oils.

Competition Disconnects U.S. Telephone Market

(Continued from Page 17)
fringe salaries for six months. The Chicago-based company has lost money in the first two months of the year, officers said. Dynascan stock has dropped from a high of \$7.625 in mid-1983, to a bid of \$6.75 in over-the-counter trading Monday.

Webcor Electronics Inc. of Plainville, New York, reported that sales of its telephone products plunged from \$12 million in the quarter ending Sept. 30, to \$4.7 million in the quarter ending Dec. 31. Its stock, traded on the American Exchange, was down to \$5 a share Monday, from a high of \$22.25 last year.

Other companies flocking into the telephone business include such giants as General Electric Co., Panasonic and Sanyo. Also entering were Conair Corp., known for its hair dryers; Hamilton Beach, the home appliance unit of Sovill Inc.; and Kraco Enterprises, which makes car stereos.

At the Consumer Electronics

Show in Las Vegas, Nevada, last January, 190 companies were displaying telephones. "The guys who last year had walking stereos this year have telephones," Mr. Bennett said.

This, of course, was hardly a surprise in an industry that has seen booms for citizens' band radios, digital watches, portable stereos, video games and home computers. "It's a traditional consumer electronics cycle," said John V. Roach, chairman of Tandy Corp., a company based in Fort Worth, Texas, and sells telephones through its Radio Shack chain.

Most of the products were made in Hong Kong, Taiwan and other parts of the Far East. Imports of telephones rose to 24.2 million corded sets and 7.5 million cordless models in 1983, up from 5.5 million corded and 1.9 million cordless units the year before, Mr. Bennett said.

Most industry experts say AT&T still dominates the business, although its market share is declining

from its once near-monopoly. Randall L. Tobias, president of AT&T Consumer Products, said AT&T now sells through 6,000 retailers and is ready to add 2,000 more outlets with the hope of raising the total to 10,000 by the end of the year.

Several other factors also account for the difficulties in the phone industry. While in many cases the hectic competition has meant bargains for consumers, industry executives note that many of the new phones did not live up to traditional quality standards set by the Bell System, leading to a consumer backlash that slowed sales of all phones.

One buyer for a large retailer noted that 10 to 30 percent of the consumers who bought inexpensive telephones returned them, with returns even higher on some models. "There were horror stories about people getting half of them back," he said.

Retailers report that customers are now shifting back to basic tele-

phones. Despite the industrywide oversupply, for example, AT&T is having trouble keeping up with demand for its Trimline models. Others say that phones with memory dialing and other advanced features represent an attractive market that will be more immune to discounting.

Industry executives also note that there is little control of quality. The FCC requires phones to be registered and checked to see that they will not harm the phone network. But passing such a review does not mean that a phone will work, only that it will not harm the network. Some in the industry joke that a piece of plywood can be certified as not harming the network.

Even this minimal regulation, however, is being circumvented in some cases. Some importers are using registration numbers stolen from other manufacturers or selling phones that are not registered, according to an FCC official involved in the registration program.

U.S. Utility Is Warned

(Continued from Page 17)
of the Massachusetts border, would be less than \$1 billion.

But the figure constantly rose, and numerous delays — due first to the protests of environmentalists and opponents of nuclear power, and most recently to doubts about the financial viability of the project — have set it years behind. On March 1, the utility said that the total cost of both plants would be about \$8.8 billion; many analysts have put the figure higher.

Last week, however, was the first time that Public Service indicated that it would accede to the demands of other owners that it kill Unit 2, which is 23-percent complete. However, the company, which holds a veto power over plans to terminate the project, said it would abandon Unit 2 only if a way was found for it to recover its \$293-million investment in the plant.

This announcement appears for purposes of record only. These shares were offered and sold outside the United States of America to persons other than citizens or residents of the United States of America.

NIMARBEN U.S.A. INVESTMENT FUND LIMITED

New Issue

300,000 Class C Participating Shares
Offering Price \$100.00 per share

March 15, 1984

Investment Manager

WOOD, STRUTHERS & WINTHROP MANAGEMENT CORP.
a subsidiary of
DONALDSON, LUFKIN & JENRETTE SECURITIES CORPORATION

DONALDSON, LUFKIN & JENRETTE
SECURITIES CORPORATION

PLEDMONT
INVESTMENT LIMITED

legrand

1983 financial highlights

The consolidated results due for presentation to the Board of Directors in early April are as follows:

(in FF millions)	1983 (1)	1982 (1)	1983/1982
Sales	3,207.6	2,841.5	+12.9%
Pre-tax income	251.7	262.1	-4.0%
Post-tax income	182.0	146.6	+24.2%
Funds generated from operations			
(cash flow)	330.5	307.2	+7.5%
Total investment	326.9	314.7	+3.9%

(1) New method: in accordance with U.S.G.A.P., the financial statements of subsidiaries in low-inflation countries have been simplified (SFAS 33 standard). On the other hand, the financial statements of subsidiaries in high-inflation countries (Brazil, Mexico) remain unchanged.

Discounting structural changes, the increase in sales would have worked out to 7%.

The drop in consolidated income is due mainly to:

- The exceptional devaluation of the cruzeiro, which lost 70% of its value against the franc in 1983; in accordance with international accounting practice, this entails recognition of the depreciation of Fiat's working assets against the franc in Legrand's consolidated income;
- To a lesser extent, a slight drop in the volume of sales in France, unrelieved in 1983 by the month of December, when sales are usually high.

Discounting Brazil, Group income would have risen 6%.

In view of increased consolidated funds provided from operations and the influx of cash generated by the June 1983 capital increase, and confident in its market potential both in France and abroad, the Group considers that it has the resources necessary to pursue its policy, i.e.:

- Systematic investment in rationalization and productivity-improvement programmes;
- The development of new ranges designed for the French and world markets;
- The acquisition of interests in complementary businesses, notably outside France.

It is against this background that the Board of Directors will be meeting at the beginning of April in order to finalize the financial statements for the year and decide on the increase in the dividend per share to be proposed to the Annual General Meeting of Shareholders.

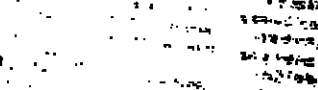
OMNI CLASSIC SERVICE™
For the new breed of traveler.

ATLANTA/Omni Atlanta
BOSTON/Parker House
CHARLESTON, S.C. (1985)
CHICAGO/Ambassador East
CINCINNATI/Omni Netherland Plaza
DETROIT (1985)
LAKE GEORGE, N.Y./
Sagamore Resort & Conf. Ctr. (1985)
MIAMI/Omni Miami
MINNEAPOLIS/Marquette
MINNEAPOLIS/Norstar
NEW ORLEANS/Royal Orleans
NEW YORK/Berkshire Place
NEW YORK/Omni Park Central
NORFOLK/Omni Norfolk
ORLANDO (1985)
SAN DIEGO (1986)
ST. LOUIS (1985)
WASHINGTON, D.C./Omni Shoreham
As well as JAMAICA, LONDON and PARIS

For reservations at any Omni/Dunfey Hotel, contact your travel agent or nearest AER LINGUS office.

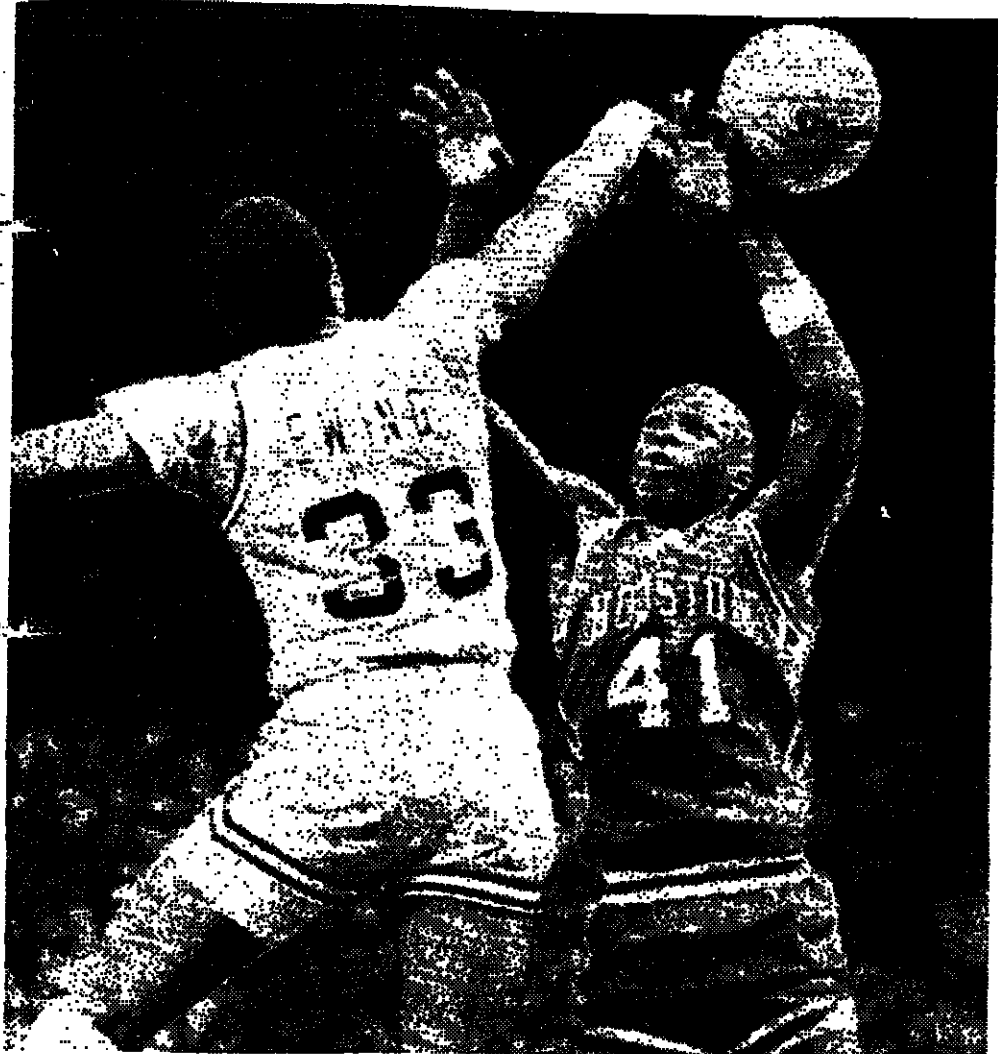
OMNI INTERNATIONAL HOTELS
A DIVISION OF DUNFEY HOTELS CORPORATION
In the U.S. call toll-free 1-800-228-2121
In Canada call toll-free 800-665-4833

ibunc
e Than
Million
Countries
World.



SPORTS

Georgetown Beats Houston for NCAA Crown



Patrick Ewing, voted the most valuable player of the 1984 NCAA tournament, rejects a shot by Rickie Winslow of Houston in Monday night's final in Seattle. Georgetown won, 84-75.

By John Feinstein
Washington Post Service

SEATTLE — Two years later, John Thompson and Fred Brown hugged again, holding each other for what seemed like an eternity. Monday night's hug was a celebration, not a consolation, after Georgetown had displayed the depth and the brilliance of Thompson's program by defeating Houston, 84-75, to win the national collegiate basketball championship.

Two years ago, against North Carolina, an errant pass by Brown had left an equally superb Georgetown team one basket short of the title. This time there was no denying the Hoyas.

Even the defensive catalyst Gene Smith, watching from the bench because of a foot injury sustained in Saturday's semifinal against Kentucky, Georgetown took the lead for good with more than 32 minutes to play and was never in serious trouble after that.

"They do everything a great team should do," said a tearful Akeem Olatunji, who played most of the second half with four fouls and finished with 15 points and 9 rebounds for Houston.

"They don't care who scores, who takes the shots. That's the difference — they aren't a selfish team. The selfish team won tonight."

And the deeper team. Even without Smith, nine players contributed to Georgetown's cause. Freshman Reggie Williams scored 19 points, 13 of them in the second half, when the Cougars fought back to within

3 points. He also had seven rebounds, three assists and a key tie-up of Olatunji when Houston still had a chance to get back in.

"Coach has always told me that if I take good shots, he doesn't mind me missing," Williams said. "I just kept taking the shots tonight because I had good ones."

The Hoyas (34-3 on the season) got 16 points from David Wingate, 14 points and 5 rebounds from their other freshman, Michael Graham, 11 points and 6 assists from Michael Jackson, and 10 points and 9 rebounds from Patrick Ewing.

Although his statistics were not overwhelming, Ewing was named the tournament's most valuable player, and there was little arguing with the choice. It was Ewing who took control of the inside in the first half when the Hoyas built their lead. And it was Ewing who kept Olatunji from dominating, pushing him far enough from the basket that Olatunji rarely got the shot he wanted.

Ewing had help, though — more than Olatunji had, and that was the difference. Although Alvin Franklin almost shot his team back into the game in the second half with a game-high 21 points, the Cougars (32-5 and national runners-up for the second straight year) just could not handle the never-ending wave of Georgetown players.

"They were in control most of the game," said losing Coach Guy Lewis. "Once they got the lead,

they controlled the tempo. We have nothing to apologize for. We got beat by a great team."

In the opening five minutes, however, Houston was more than great. Faced with a 2-3 zone, the Cougars made their first seven shots, including two bombs by Michael Young (18 points on the night).

But it couldn't last. The Hoyas switched to a man-to-man; the Cougars started missing and Georgetown, after trailing by 14-6, methodically took command. A 26-8 run gave the Hoyas a 32-22 lead with 6:15 left in the half.

Ewing keyed the surge, not just with three baskets and a lovely shovel-pass assist for Graham, but, as always, with his defense.

With the score at 16-11, Olatunji rebounded a shot by teammate Rickie Winslow and had the ball three feet from the basket. Ewing was in his way. Olatunji faked, but Ewing never moved. He went up, Ewing with him, and the shot rolled off the rim. Something seemed to go out of Olatunji after that. He worked hard and played courageously, but did not seem eager to challenge Ewing again.

With 7:43 remaining in the half, Ewing sat down with his second foul and Thompson spread his team to pull Houston out of its 2-3 zone. Lewis went to "50-2A," his zone trap, putting two men on the ball all over the court.

"We just didn't think we could match up with their quickness in

the man," Lewis said. "This was our best chance."

The Cougars' chances would have been helped had they not lost their poise during the last three minutes of the half. A jump shot by benchwarmer Benny Anders got them to within 34-30. But Young tried a forced, off-balance shot and Jackson promptly made one at the other end. Then Wingate drew Olatunji's third foul on a driving lay-up and soon scored on another: 40-30 at intermission.

After Olatunji picked up his fourth foul by clanging Graham's back 28 seconds into the second half, Williams drove right past him for a 12-point lead.

But Franklin would not quit. During the next nine minutes, the Houston guard scored 14 points, being slowed only briefly with a slight ankle twist. When he hit two foul shots with 10:29 left, it was 57-54 and it was a contest.

Enter Williams. Thompson always says a basketball team is built, not hatched, which is why he uses 10 men early in the season — even when some of those players are still feeling their way. Monday, some of those early painful moments paid off.

After Franklin made it a three-point game, Williams drove the middle, missed a short shot, rebounded and put it in for a 59-54 lead. Moments later, after a Reid Gettys charge, Williams made the same move — but this time, when the defense came to him, he slipped the ball to Graham for a ferocious

dunk. It was 61-54 with 9:30 left and the Cougars were running out of gas.

Olatunji tried to make a final move, but Houston never got within five again. Its one chance came with 2:30 left, after Graham had bricked two free throws with the score 74-68. The Cougars went immediately to Olatunji, posted up.

But before he could turn to make his move, the Williams slippy slipped up on him and put his hands firmly on the ball.

Jump ball — and Georgetown's turn on the alternating-possession rule. Eight seconds later, Wingate took two free throws and, after 12 years as a coach, Thompson had his national title.

"At times I've been obsessed by the national championship," he said. "I've awakened in the middle of the night in the summer saying 'national championship.' I don't want 10 like John Wooden — the former UCLA coach. I just wanted to get one. Now I have one."

1984 NCAA Tournament

PRELIMINARY ROUND

Northwestern 84, Long Island U. 87
Cleveland 89, Rider 82
Princeton 65, San Diego 66
Marshall 68, North Carolina A&T 69
Alabama 51, Wake Forest 48

EAST REGIONAL

First Round

Temple 65, St. John's 63
Richmond 77, Auburn 71
Indiana 75, Richmond 67
Virginia 58, Iowa 57

Second Round

North Carolina 77, Temple 66
Cincinnati 77, Tennessee 66
Virginia 53, Arkansas 51, OT
Syracuse 76, Virginia Commonwealth 63

Semifinals

Virginia 62, Syracuse 55
Indiana 72, North Carolina 68
Virginia 56, Indiana 48

MIDWEST REGIONAL

First Round

West Virginia 64, Green Bay 62
Brigham Young 61, Alcorn State 59
Louisville 72, Marshall 72
Villanova 84, Marshall 72

Second Round

Kentucky 72, Brigham Young 68
Maryland 62, West Virginia 70
Louisville 67, Tulsa 67
Illinois 64, Villanova 54

Semifinals

Illinois 72, Maryland 76
Kentucky 72, Louisville 67

Final

Kentucky 54, Illinois 51

SOUTHEAST REGIONAL

First Round

Louisiana Tech 66, Fresno St. 54
Marquette 74, Louisiana 54
Kentucky 77, Alabama 65
Kansas 57, Alcorn 51

Second Round

Houston 77, Louisiana Tech 69
Marquette 51, Purdue 48
DePaul 75, Illinois 61
Wake Forest 69, Kansas 59

Semifinals

Houston 78, Marquette 51
Wake Forest 73, DePaul 71

Final

Houston 66, Wake Forest 63

WEST REGIONAL

First Round

Nevada-Las Vegas 68, Princeton 56
Dayton 74, Louisiana 54
Washington 64, Nevada-Reno 54
Southern Methodist 62, Miami, Ohio 69

Second Round

Nevada-Las Vegas 72, Texas-El Paso 60
Georgetown 57, Southern Methodist 34
Washington 60, Duke 78

Semifinals

Dayton 64, Washington 58
Georgetown 62, Nevada-Las Vegas 48

Final

Georgetown 61, Dayton 49

FINAL FOUR

Semifinals

Houston 49, Virginia 47, OT
Georgetown 53, Kentucky 67

Championship

Georgetown 84, Houston 75

White Sox Down Orioles, 5-2, in Opener

Compiled by Our Staff From Dispatches

BALTIMORE — Solid pitching, errorless defense and timely hitting gave the Chicago White Sox a 5-2 victory over the world champion Baltimore Orioles in Monday's American League opener here.

LaMar Hoyt, the 1983 Cy Young Award winner, scattered seven hits over 7 1/2 innings and Brit Burns, shifted to the bullpen this year because of the Chicago's surplus of talented starters, turned in a strong relief appearance.

The White Sox got to loser Scott McGregor for two first-inning runs.

Rudy Law singled and went to third on Carlton Fisk's bloop single.

Law scored on Harold Baines' infield out, after Greg Luzinski and Tom Paciorek walked. Ron Kittle's long sacrifice fly scored "Kittle."

"The Orioles got a run back in the bottom of the first inning on Cal Ripken's wind-blown home run into the right-field bleachers."

Chicago nicked McGregor for another run in the second. Julio Cruz walked, stole second and went to third on a throwing error by first baseman Eddie Murray.

Cruz scored on Law's fly to center field.

Baines put the Sox ahead, 5-1, when his sixth-inning shot down the right-field line bounced off the wall for a double that scored Scott Fletcher and Fisk, both of whom had walked.

McGregor, having given up a career-high six bases on balls, was replaced by Storm Davis, who retired seven batters in a row.

Having coasted through the first seven innings, Hoyt ran into trouble in the eighth when Dan Ford and Ripken produced one-out singles.

Reliever Burns, after giving up an RBI single to Murray, retired John Lowenstein and Ken Singleton to end the threat.

For the first time in major-league history, a current U.S. president joined a team on its bench during a game.

Ronald Reagan "sat right where I usually sit," said Baltimore Manager Joe Altobelli. "I didn't have the heart to say, 'Move over.'"

"He's certainly active, and I'm not going to say 'for his age.' He looks younger than I do. But then, he has an easier job." Altobelli is 52, 20 years younger than Reagan. Reagan had thrown out the game's first ball.

After waving Oriole catcher Rick Dempsey back from patronizing

BASEBALL ROUNDUP

20-foot range to perhaps 50 feet, Reagan took a quick windup and fired a respectable fastball.

"Definitely a strike," said Dempsey. "He kept the ball down."

"Yeah, it was a real nice pitch," said Baltimore's Jim Dwyer, "but, hey, he probably had a mound built in the White House."

"He probably could have gotten out better than I did," said McGregor, who also lost to Hoyt in Game 1 of last year's league-championship series, when Reagan attended.

"Every time he shows up, I lose," said McGregor.

"A remarkable fastball," said pitcher Jim Palmer of Reagan's showing.

"It proves again that you don't need spring training."

"The president was telling us a story on the bench about how he played Grover Cleveland Alexander in the movies," said Palmer. "He said he threw his best fastball one time and [White Sox star Ted] Lyons caught it barehanded, then apologized for showing him up. I told him:

"Mr. President, don't worry. That's how they warm me up now and I'm only 38."

Said Oriole Owner Edward Bennett Williams: "It was a great opening day — except for the ball game."

fielding a grounder by Bob Boone for what appeared to be the final out of the game.

His throw skipped past first baseman Dave Stapleton and permitted Juan Benitez and Fred Lynn to score.

"I should have taken my time," said Gutierrez. "The runner was Boone — he's not fast. I should have taken a step and then thrown."

Until the final inning, the Angels had managed only five hits off Bruce Hurst.

But Benitez led off with a single and one out later Hurst walked. Lynn, Hurst was replaced by Bob Stanley, who got Bobby Grich to ground out (both runners advancing), before Daryl Sommers was given an intentional walk and chase Torre.

Edie Milner cleared the lowered eight-foot outfield wall with a three-run homer in the second to run the edge to 6-1 and chase Torre.

Milner also had a single and a double in four at-bats.

Soto, 17-10 a year ago with 242 strikeouts and league-leading 18 complete games, fanned eight while going the distance. Soto has never lost to the Mets in nine career decisions.

Darryl Strawberry, last season's rookie of the year, emerged leading off the second for New York's lone run.

The Mets, under rookie Manager Dave Johnson, lost an opener for the first time in a decade; they had won their last time to tie the St. Louis Browns for the modern-day record.

(UPI, WP, AP)

Jerry Remy followed with a single, but rookie center fielder Gary Pettis grounded into Miller with a strong throw home.

Reds 8, Mets 1

In Cincinnati, Dave Parker had a two-run single and Mario Soto shut down New York on seven hits as the Reds routed the Mets, 8-1, in the National League opener.

Parker, who signed with the Reds as a free agent in the offseason, had a bases-loaded single in his first at-bat as Cincinnati scored three runs in the first off Mike Torrez.

Eddie Milner cleared the lowered eight-foot outfield wall with a three-run homer in the second to run the edge to 6-1 and chase Torre.

Milner also had a single and a double in four at-bats.

Soto, 17-10 a year ago with 242 strikeouts and league-leading 18 complete games, fanned eight while going the distance. Soto has never lost to the Mets in nine career decisions.

Darryl Strawberry, last season's rookie of the year, emerged leading off the second for New York's lone run.

The Mets, under rookie Manager Dave Johnson, lost an opener for the first time in a decade; they had won their last time to tie the St. Louis Browns for the modern-day record.

(UPI, WP, AP)



Carlton Fisk, sliding past catcher Rick Dempsey after Harold Baines' sixth-inning double, registered Chicago's final run in a 5-2 opening-day victory over the Orioles in Baltimore.

2 Fallen Giants: Amazing Grace, Appalling Disgrace

Belgian championship two years ago.

Keith Burkinshaw, meanwhile, is about to try to win the UEFA Cup in his last days as manager of Tottenham Hotspur which, in eight years under his guidance, has met

ROB HUGHES

"triumph and disaster" with the consistency — the rare consistency, these days — of trying to offer crowd-pleasing sport.

Since one man departs the stage in disgrace and the other with more integrity intact than armies of others, we would be well advised to drive a firm wedge between the two.

Their connection was Black Monday.

First, the bad news. What can we say about Gerets? He was, until now, among the most respected footballers in the world. A hearty, powerful, tenacious, responsible competitor in defense or attack; a

player who at the last World Cup showed how to subdue the genius of Diego Maradona a damn sight more fairly than Italy's Claudio Gentile and Brazil's Batista eventually did with brutality.

Yet by his own admission Gerets had, a few weeks before that tournament, conspired to commit the foulest of all sporting corruptions: He paid the opposition to lose a game.

Gerets has confessed he handed over \$4,000 (about \$5,760) from a Standard Liege slush fund to Waterschei's Roland Janssens to distribute to players for their assurance they would not prevent Standard's winning the crucial final game of the season.

Janssens is banned for two years and his teammates get off with fines equivalent to the stinking money they pocketed. Standard's veteran trainer, Raymond Goethals (who in any event retired when the scandal broke in February) gets a life ban, as does his chairman, Roger Peit (the former

chairman and former vice president of Belgian soccer is also removed from the national association's roll of honor).

The only thing that doesn't reek to high heaven about the whole business is the speed with which Belgian soccer authorities finally got on with the job of punishing (some of) the guilty without endlessly prevaricating and leaving the courts to launder their dirty linen.

Gerets has certainly lost more than any other. He needed tranquilizers to withstand the shock of being questioned by police when he arrived for a recent international against West Germany and will doubtless never recover from the stab in the back from his Italian employer, A.C. Milan.

Without waiting for any verdicts, without pausing to consider the hypocrisy of its own involvement in Italy's bribery affairs, Milan announced that whatever happened, Gerets had played his last game for it.

From warped morals to cleaner, braver ones, Burkinshaw came up to the Yorkshire coal mines to graft a living. As he always said: "With ambition and hard work, you can get somewhere in the world."

His blunt, eye-to-eye honesty helped Newcastle to the UEFA Cup final, but his "communism" — always on the players' side" got him the sack.

Eventually he landed the manager's job at plucky Tottenham, and through the turmoil of relegation and then quick promotion he was persuaded to pull a master stroke that benefited the whole British game.

After the 1978 World Cup, Burkinshaw responded to the advice of a wily old joker among English managers, Harry Haslam, to invest three-quarters of a million pounds in a pair of Argentines — Ossie Ardiles and Ricky Villa.

The consistent orchestration of Ardiles and the moody but ultimately explosive match-winning flair of Villa kept taking a gifted but unpredictable league side all the way to Wembley cup finals. "Winning two FA Cups isn't bad, is it?" asked Burkinshaw on Monday.

The grapevine says Burkinshaw

resigned (although he stays until the season's end) before he was pushed. But it's a remote grapevine that stretches to Monte Carlo, where businessman Irving Scholar pulls the strings after a takeover last year.

How can a man who operates by telling you truth, period, work by remote control?

Tottenham may well blame Burkinshaw for transfer speculation that has had erratic results. It may feel he is not quite the public persona its high-powered public relations people would choose. But if the next man in is a sharp-talking main-chance operator, we bet he'd be in the locker room.

"We've had a good relationship," says the club's captain, Steve Perryman. "He does love the game — he's at his best in a truckload with the players. I can't believe he'll cut himself off at 49."

He won't. First Burkinshaw will ask his players to give him a send-off by winning the UEFA Cup and then he'll work like a demon to strengthen the league position before he hands over in two months time. Somewhere, sometime, Tottenham will be sorry it edged him out. Honest guys are getting to be rare birds in soccer these days.



Eric Gerets He paid the opposition to lose.

Major League Standings

NATIONAL LEAGUE

Team	W	L	Pct.	GB
Chicago	0	0	0.000	0
Philadelphia	0	0	0.000	0
Pittsburgh	0	0	0.000	0
Atlanta	0	0	0.000	0
San Diego	0	0	0.000	0
New York	0	0	0.000	0

West

Cincinnati	0	1	0.000	0
Atlanta	0	0	0.000	0
Houston	0	0	0.000	0
Los Angeles	0	0	0.000	0
San Francisco	0	0	0.000	0

AMERICAN LEAGUE

Team	W	L	Pct.	GB
California	0	0	0.000	0
Detroit	0	0	0.000	0
Minnesota	0	0	0.000	0
New York	0	0	0.000	0
Toronto	0	0	0.000	0
Boston	0	0	0.000	0

West

California	0	1	0.000	0
Chicago	0	0	0.000	0

Monday's Line Scores

AMERICAN LEAGUE

Chicago	5	2	0
Baltimore	2	5	0

NATIONAL LEAGUE

Chicago	5	2	0
Baltimore	2	5	0

Final NHL Regular-Season Leaders

GOALKEEPING

Team	MP	GA	SV%
Parro	120	3	0.930
Alton	120	3	0.930
Robson	120	3	0.930
Johnson	120	3	0.930

GOAL SCORING

Team	MP	GA	SV%
Parro	120	3	0.930
Alton	120	3	0.930
Robson	120	3	0.930
Johnson	120	3	0.930

NBA Standings

EASTERN CONFERENCE

Team	W	L	Pct.	GB
Atlanta	54	19	74.0	0
Philadelphia	48	26	64.7	7 1/2
New York	47	27	63.7	8
New Jersey	43	31	58.3	12 1/2
Washington	33	41	44.3	22 1/2

CENTRAL CONFERENCE

Team	W	L	Pct.	GB
San Antonio	44	31	58.7	0
San Antonio	44	31	58.7	0
San Antonio	44	31	58.7	0
San Antonio	44	31	58.7	0

USFL Standings

EASTERN CONFERENCE

Team	W	L	Pct.	GB
New Jersey	5	1	0.333	0
Philadelphia	4	2	0.667	0
Pittsburgh	2	4	0.333	0
Washington	0	6	0.000	0

WESTERN CONFERENCE

Team	W	L	Pct.	GB
Birmingham	5	1	0.833	0
New Orleans	3	3	0.500	0
Tampa Bay	3	3	0.500	0
Memphis	2	4	0.333	0

